

Freewheeling

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Travelling The East Coast Bike Route



Freewheeling

FREEWHEELING AUSTRALIA PUBLICATIONS
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Dear reader,

If you are one of the many people who have subscribed to *Freewheeling Australia* and wondered why you haven't received an acknowledgement or why the back issues you ordered are slow in arriving, then we think you deserve some explanation.

Firstly Freewheeling Australia Publications is not a multi million dollar publishing corporation with huge cash backing necessary to flood the country's book shelves and TV screens with evidence and news of this great new publication. The economics of magazine publishing relate to scale and size of production plus blanket promotion and advertising to let people know the magazine exists. It is generally accepted that any new magazine takes a while before it starts to return its initial investment. We are happy (lucky) to break even and cover costs until the fourth issue when we expect to be of a sufficient size and have enough sales to pass that break even point. Even then the labour, effort and money used to produce issues 1 to 4 may never be recovered. So you can see just how important our subscribers are to us. Firstly you pay us in advance which means that we can use your money to keep the magazine growing and secondly by dealing direct with us we can use more of the money you pay for your mag.

Like most magazines our size (circulation 6500) we rely on subscribers for positive support. Even though the cover price has been increased we have maintained much the same price for subscriptions. The difference in these two prices now represents a real saving for anyone wishing to subscribe. We hope you will also introduce your friends through gift and nomination subscriptions. For doing this you will receive one extra copy added to your subscription.

Freewheeling continues to be available through bike shops, newsagents and bicycle groups through-out Australia. In time newsagent distributed copies will become rarer as we need to eliminate wastage caused by loss of unsold copies in this area. You can ensure your regular copy by placing an order with your newsagent. Distributors are listed elsewhere on this page.

Finally readers should note the change in mail out policy for Back Issues. These will now be dispatched independently of bulk (subscription etc) mail outs. Postage and packing charges are now extra and though they are the full APO amount you should receive your copies in quicker time than was previously possible.

We hope we can continue to keep going in our present direction. If we do then you can be certain that it's because of you, our reader's/subscriber's support.

Thank you very much,

Warren Salomon

Warren Salomon
Publisher



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AUTHORS & CONTRIBUTIONS: Well researched articles (preferably accompanied by photos or graphics) are welcomed by the publisher. The text should be typed double-spaced and photographs accompanied by suggested captions. Touring articles should be provided with a clear map of the route described. These will be returned to authors after publication.

Letters for the reader's column *Write on* are also welcomed — typed if possible.

Freewheeling



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cover photograph by Warren Salomon:
CYCLING ALONG THE EAST COAST BICYCLE ROUTE
NORTH OF GLOUCESTER NSW.

this photograph

PART OF THE BIG HILL: GIBRALTAR RANGE NSW

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TRANET and Bicycles

Dear Freewheeling,

In conjunction with UNCSTD (The U.N. Conference on Science and Technology for Development) there will be a Biketon and program on "Bicycles as an Alternative Mode of Transportation". The goal is to use this U.N. Conference to raise the visibility of the many people in all parts of the World looking to Bicycles as a way to provide low cost, pollution free transportation.

An important part of the program will be a Biketon leaving Paris June 5th (Environment Day) and arriving in Vienna after visiting a number of European cities to raise the consciousness of bikes. George Krassovsky (7 rue Boucicaut, F-75015 Paris) will be leading that contingent. Other groups will be crossing America, Brazil and other countries with the same message. We hope we may report on a cross Australia bikethon. Those who can will join us in Vienna to express the World wide interest in bikes through exhibits, seminars, movies and other actions.

The bike program is part of a wider people-to-people input to UNCSTD. Key coordinators of the whole program are: NGO FORUM (C/- Karim Ahmed, Natural Resources Defence Council, 122 East 42nd St., New York 10017) and Hubert Fragner (ALTERNATIV FORUM, Post Fach 45, A-1231, Wien AUSTRIA).

We hope AUSTRALIA will join this international program with local programs as well as participation in Vienna.

TRANET
(Transnational Network for
Appropriate/Alternative Technology)
P.O. Box 567
Rangeley ME04970 U.S.A.

Departure

Dear Freewheeling,

I'm a 25 year old vegetarian, cyclo-touring enthusiast and at present am making plans for an extended camping tour (approx. 2 years) in Australia, North America and Europe, beginning the first week in July this year. As I am purchasing new equipment the Australian section will be more of a 'shake-down' to iron out any equipment, dietary problems etc. as well as 'tuning up' for the overseas sections; around 10 weeks will be spent in Australia possibly on a circuit of the East Coast from Brisbane to Adelaide and inland back to Brisbane. (Just at the moment, [Feb '79] this route is still flexible).

October '79 to May '80 will be spent in North America and from June '80 I

The photos above were supplied by a reader. They were taken in Bathurst NSW area around 1945. If you have any old bicycle photographs send them in to us and we'll be glad to publish them and return them to you afterwards.

Old timers

Dear Sir,

I have just finished reading your magazine *Freewheeling* No 2 and thoroughly enjoyed it. Please find enclosed subscription for the first issue plus four more. I note in *Letters* one of your readers gives the name of his local cycle shop, so I thought that I would give mine as I have had wonderful service and complete satisfaction from mine. He is Roy Barnes of 15 St. Georges Crescent, Faulconbridge 2776. He puts himself out to help his customers and is an expert repairman. I would be interested to hear other readers' opinions of 10-speed gears. I am an old timer who rode a bike during the Depression with my swag on. It had a Sturmey Archer 3-speed gear, I did 7,000 miles

with a 90 lb. swag plus myself. The 3-speed hub never gave any trouble, though I did fray the cable where it came out of the hub. What I am getting at is that the modern 10-speed derailleur seems to be to be overrated as it needs constant attention, yet 40 years ago the Sturmey Archer 3-speed hub would go for thousands of miles with no attention or adjustment.

Yours faithfully
R. J. Knight
Faulconbridge NSW

The publishers would appreciate any stories and anecdotes from readers concerning their cycling experiences, especially the kind of observations made above.

will be in Europe. (Exactly where depends on what their next winter will be like.)

Anyone interested in accompanying me on any section of my trip is welcome to write to the address below and discuss further details; in fact I would be pleased to hear from anyone wishing to correspond, particularly those who may have had overseas experiences — there's so much to learn.

Wishing you all the best of health, peace and love.

Sven R. Tonisson
231 Maundrel Tce,
Aspley 4034

In Anticipation...

Dear Freewheeling,

Firstly my congratulations on your informative and attractive magazine. I've only just come across it and it was a welcome surprise.

Having taken up cycling in a serious way after a break of 12 years since my

teenage years, I was wondering if perhaps any of the following areas could be treated in future issues:

- Review/comparison of stock bikes;
- evaluation of separate parts/equipment available (e.g. tyres, brakes, seats);
- safety points (e.g. dangerous technique, road sense);
- maintenance and tuning;
- buyers guide — where to go for what you need;
- column for readers tips on touring, performance, equipment etc.

Yours in anticipation of issue 4.

David K. Dahl
Padstow, NSW

REFLECTA-SOX — help make a cyclist visible at night.

Those who wish to ride at night are forced to make themselves as visible as possible to avoid being run down by

cars. A single head-light and tail-light are not really adequate even if they are of good quality, as a single light can easily get lost among the glare of street-lights, oncoming cars and so on.

Reflectors offer the opportunity for the cyclist to shine the light from a car's headlights directly back to the car and its driver. However plastic reflectors of respectable size are rare on high-quality bikes, and pedal reflectors are seldom used by those with light-weight bikes, especially racing cyclists.

A simple solution is to put the reflectors on the cyclist, rather than on the bike. The area available is then much greater, so that much more light can be reflected and the reflectors may be worn when required and stored at other times. This has been made possible by the availability of reflective cloth. It has similar reflective properties to the normal reflective tape, but it is flexible and durable enough to be sewn onto clothing,



Time exposure of Reflecta Sox Photo: Peter Ewing



The Natural Way to Go

Fresh air. Good company. Healthy outdoor freedom. It's the world of Raleigh that more and more people are discovering every day.

Raleigh is the quiet, fun way to get there — whether it's a quick trip to the shops, or around the block, or to those peaceful, secluded spots you could never reach by car. British to the boot-heels, Raleigh combines superior performance with the finest in cycle technology. But what else would you expect from, the world's largest cycle maker? Get together with a Raleigh. At your local cycle specialist.

RALEIGH



panniers and the like. As a car's lights on low beam are directed largely downwards, it is an advantage to have the reflectors as low as possible, and the benefits of moving reflectors are obvious when looking at pedal reflectors.

Reflecta-sox are simple gaiters made of reflective cloth. Mine are rectangles 12cm by 35cm with Velcro fastening at each end. They are easily strapped around the ankles, doubling as bike-clips for long pants as well as fitting bare legs when required. They offer a large reflective target from all directions and the rhythmical movement catches a motorist's eyes most effectively. Reflecta-sox are very light and may easily be carried under the bike seat during the day. They are easy to make and would provide cycle clubs with a means of raising funds while improving safety if they were made and sold at a modest profit. 3M reflective cloth is available for about \$1.50/sq. ft. and even less as offcuts, so the cost of materials is about a dollar a pair.

Available from
Cyclists Action Group WA
2 Bardsen St
COTTESLOE WA.
Bruce Robinson

CYCLE WAYS LITERATURE

You may have seen this publication before but it has only just come my way and it seems worth writing about. *Cycle Ways; a review of the literature on cycle ways prepared for and on behalf of the National Capital Development Commission, Canberra, Australia* by Ludmilla Howley, University of Adelaide, Faculty of Architecture and Planning. It was produced in May 1975 and a second edition with some corrections appeared in February, 1976.

This is a very comprehensive review with world-wide coverage. The author has not only read the literature but digested it and produced clear and informative diagrams and a large bibliography enables the user to refer to the original literature if necessary. The works discussed are not rigidly restricted to the subject of cycle ways but include other relevant topics such as parking, lighting and safety.

I have a few minor criticisms. It would be a more useful reference work if it had been provided with an index, and this lack is compounded by lack of reference within the text from one section to another or to the informative appendices. This is definitely a book for browsing and some delightful things come to light if you do. For example did you know that

Amsterdam has a network of cycle ways at the rate of 1.2 km of cycle way per square kilometre of city or that in Portugal the minimum age for cyclists on a public highway is 12 years, and haven't you always wanted to see a plan for a bus trailer that could carry 17 bicycles, 2 strollers and six surf boards?

Jean Dartnall

Cycling with Australian Youth Hostels

In Freewheeling number two, there was an article by Jim Donovan titled, 'Touring in Western Europe'. It listed the requirements for touring by bike in Western Europe. Jim made mention of the youth hostel movement. For those of you with no knowledge of youth hostels here is a short resume of them; youth hostels are old castles, cottages, sheds, boats etc. which provide accommodation for travellers at a cheap cost. They are located in towns, cities and in the country across the world. For about \$2.00 to \$3.00 Australian, you can stay in a hostel for up to three nights (longer at the discretion of the warden). They consist of a kitchen(s), bunk rooms which are segregated by toilet, bathrooms in most cases and a common gender room, where the weary traveller can relax in convivial surroundings.

You may not be aware that there is a youth hostels movement in every capital city in Australia. The Youth Hostels Association (YHA) has youth hostels scattered across the country. They provide the same facilities as the overseas hostels, but with their own charm. Check your telephone directory for the telephone number of YHA in your state.

Solve all your hassles when touring. Check your YHA handbook for the location of the hostels. In Victoria, hostels are located at Warburton, Halls Gap, Beechworth, Warrandyte, Apollo Bay, Geelong, Lavers Hill, Melbourne etc. For the touring cyclist, the use of hostels offers plenty of scope in your travels.

In Victoria, there is a YHA Cycling Club, whose members feature rides for all classes of cyclists every weekend. The club organizes trips to youth hostels each year. The telephone number can be found in the inside cover of Freewheeling.

Using youth hostels opens a complete new world to your cycling pleasures whether it be in Australia or overseas. So join now!

Kim Fawkes

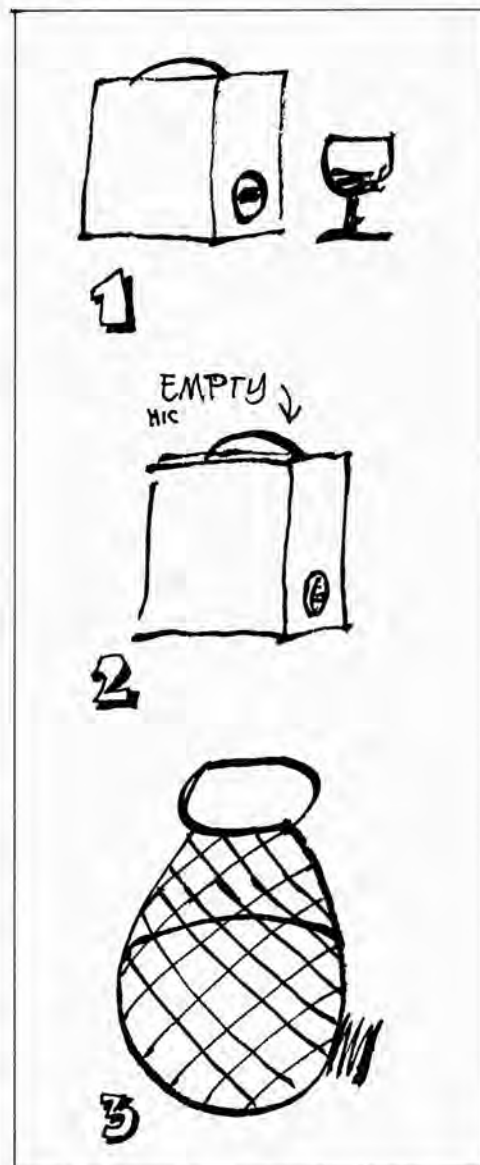
Wine into Water . . .

There are many fine ways to ensure plentiful water at a campsite: bushwalkers carry big billies and japara water buckets, some cyclists merely camp by a tap or tank. I have a cunning do-it-yourself suggestion.

First you visit your local bottle shop and buy a wine cask. You empty the wine from the cask; take your time here. Once it is empty you prise open the box, this is recycled, and throw away the handle.

The bag that remains is your water bag. You will discover that you can dismantle the tap. If you make a mistake start again. Undo the tap and fill the bag with water and replace the tap. You can even steal Granny's string bag to hang it up in. When you move on, empty the bag and fold it up. (Next issue: what to do with empty beer bottles.)

Harry Barber



RAMBLING

Lighting Systems

The new 'generators' (they are actually alternators) are much more efficient than the old ones, giving a lot more light at low speeds where it's needed. They do have one major problem, and that is that the more efficient ones are too efficient at high speeds with six-volt models producing more than twice that voltage. The result is blown bulbs. The only solution apart from a car-type regulator or a battery recharging system seems to be to ride at lower speeds down hills.

A particularly good set is the Sanyo NH314 which comes with twin square headlights and a single taillight. One headlight is wired in series with the taillight but a better method with this twin-pole alternator is to wire one headlight to one pole, dispense with the other headlight and put the 3W bulb from it into the taillight and wire it to the other pole. Result, a 6v3W headlight and taillight and a lot more vision and visibility. The alternator is available separately at a considerable saving, but the headlights have such a good beam that they are probably worth the extra cost.

Keep your generator/alternator drag down and efficiency up by mounting it radially, that is, a continuation of the shaft of the generator would pass through the centre of the hub. This means the roller is tangential to the tyre and there is a minimum of power loss.

The Local Product

The majority of components on imported and so-called local bicycles are imported, and most of them from Japan. The biggest items in the cost of a touring bike are often the frame (retail \$45-\$200) and the panniers (retail \$20-\$100+) and many frames are made here. But until recently, virtually all panniers were imported, mostly from Britain. However, a Western Australian firm, Wilderness Equipment, produces what looks to be a very interesting line of bags for the front and rear of a bicycle as well as a wide range of other gear for cyclists, campers, bushwalkers, canoeists, mountaineers and skiers. All their products are designed with function, comfort, strength and durability in mind rather than fads in mind, they say. Their catalog is well worth writing for, it's free and comes with a philosophy of design for each item rather than pretty colour pictures. In the meantime, Wilder-

ness Equipment's address is PO Box 200, Claremont 6010. You can also ring them on (09) 386 4851 between 4 and 5pm local time. Ask for Sandra or Ian Maley. Good luck, but your chances by post are better, I've rung them many times and had no answer.

Wet Socks

Keep your water cool on a hot day by evaporation. The old bushies' waterbag worked well and so will wet wool socks around your water bottles.



Big Reflector Mounts

Karrimor racks do not have suitable attachments for large reflectors but a 6mm brass rod bent into a square U shape and attached upside down on the verticals at the rear of the rack makes a good mount. Aluminium rod is better still.



Either way, 10 - 20 turns of copper wire will hold it firmly and if you make it high enough, there is room for a taillight. This reduces the ability of the rack to carry long items, but there is still room for a sleeping bag, foam sleeping mat and a tent to sit transversely.

Crossed Threads

European frames have right-hand threads on both sides of the bottom bracket and so the right one can loosen when you're putting a lot of effort into pulling a large load up a steep hill. There are several ways to prevent this: drilling a hole and putting a small pin or grub-screw through into the cup (though not through it, obviously); wrapping Teflon tape — the stuff plumbers use on pipe threads — around the cup before screwing it in; using a little Loctite or similar thread-locking agent on the threads before screwing it in (make sure you get the right grade or you can have a lot of trouble with removing it later); or have the threads brazed up and new threads cut to take standard Australian/British threaded cups each side, ie right-hand thread on the left and left-hand on the right. Get a bike shop or frame builder to do it, but check the price first.

Bits and Pieces

An interesting addition to rice-based meals is dried mushrooms. They add flavour and colour and are easily prepared. You can buy them from Chinese and specialty food shops or dry them yourself very easily in the refrigerator in brown paper. Don't put them in the freezer or the crispier. Just leave them till they're hard, then chop, grate or blend them to about the size of rice grains. They keep very well in a jar. To cook, put them with the rice a few minutes before it's done.



A couple of ten-cent coins can make all the difference in an emergency. They take up little space in a first aid kit, add little weight and can save precious minutes if you have to call for help as there isn't always a free emergency number in country areas.

Book of the Month

Needed: a comprehensive and comprehensible book for beginning cyclists. It would cover choosing and buying a bike, components and accessories and their advantages and disadvantages, fitting, maintenance — basic and advanced, history, politics and associations, riding techniques, first aid, touring techniques, selected tours, racing and such. It would need to be written in Australia for local conditions and for cyclists of various ages, backgrounds and mechanical abilities; something like Richard's Bicycle Book at a less advanced level.

At first glance, Murray's Guide to Cycling (by Paul Fidlon, published by Murray Book Distributors, \$3.50) looked like it went quite a way toward being this sort of book. Its chapter headings were right and the pictures looked promising. Unfortunately, it fell well short of the mark. Much of the material has appeared elsewhere and is out of date or irrelevant (do you need to know that 88.04 per cent of Pedal Power ACT members live in the capital territory and 11.03 per cent live outside it. Where are the rest, 0.93 per cent sitting on the NSW-ACT fence?).

There are some interesting photographs, including many from the 1960s of people who did long rides. One man rode a dragster from Perth to Darwin with a huge mound of gear hanging from each end. His gear included a rifle. Who says you need a 531 double-buttressed diamond frame? But a lot of the pictures are pretty uninformative and the captions range from "A well-stocked bike shop is a joy to behold" to "This is a racing bike, hence the lightest and slightest of chain guards." The "chain guard" is what someone who has ridden a ten-speed would call a front derailleur.

Many of the statements on components and accessories are one-eyed which is particularly unfortunate in a book aimed at beginners who are likely to take it as gospel.

The maintenance section deserves special mention for its confusing, complicated and bitty nature. It is difficult for an experienced cyclist to follow some of the instructions.

Not recommended, particularly for beginners.

Michael Burlace

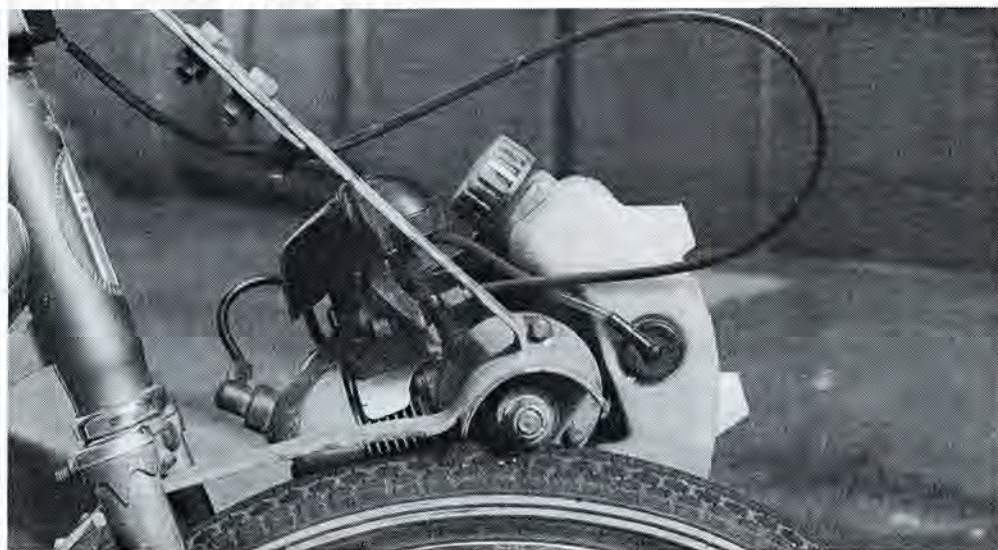
Changes in the law relating to motorised bicycles in the past 18 months in NSW have brought a series of motor units onto the market. At the moment, only NSW and the Northern Territory permit the use of small motors on bicycles without restriction. Victoria and the ACT are expected to legalise their use soon and in Queensland they are permitted with the only restriction being that a rider must hold a motorcycle licence. The maximum power is usually about 200 Watts or 0.25 horsepower. This means that people who want some help with their cycling and are prepared to put up with the need for refuelling and the associated disadvantages can have it for about \$200.

There are a couple of two-stroke petrol-powered versions and a couple of rechargeable battery-powered models. The petrol models have the edge as far as mobility is concerned — they can go further from their power source because they can carry fuel and petrol stations are ridiculously common in this country. Recharging ones are limited to about 50 km (by the manufacturers' estimates). That range involves some pedalling, unpedalled they will take you about a

third of that distance on flat ground. They do it quietly, which is more than can be said for the petrol-powered versions. The petrol models get up to 40 km on a tankful (600 ml) which is about a cent a kilometre. This is with assistance up hills and the motor running constantly. The electric ones cost about 5-6c to recharge for their 15-50 km which means 0.1 to 2.66c per kilometre. On top of these costs would be increased maintenance. Tires would wear faster on those which drive through friction on the front wheel and transmission wear would be greater on those which drive through chains to the rear wheel.

One solution to the problem of limited range on the rechargeable models was produced by a German company last year. It was a tricycle with a solar panel for a roof and an electric motor driving the front wheel through a chain. This model, the Solarmobil, was limited to downhill at night and during heavy cloud cover as it had no pedals and no batteries. The addition of these and a means of recharging the batteries in sunlight during stops might produce the ultimate in powered vehicles. If you're interested in motorising your bicycle, contact the people below:

The Vinkel motor showing drive wheel.

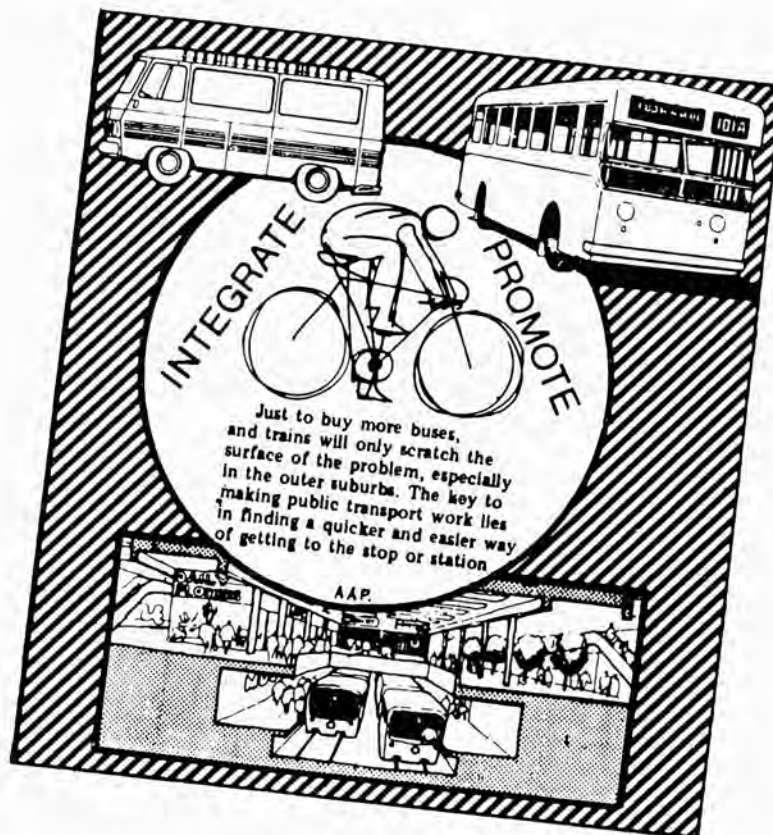


Chris Kendall, Box 15, PO Rouse Hill 2153 (02) 629 1119 for the Vinkel two-stroke unit which mounts on the head tube and drives the front wheel through a steel pulley rubbing on the tire. Cost \$185 plus \$12 and half an hour for fitting. Weight 3kg empty. Warranty 6 months.

Ken Coles, 1 Chilvers Road, Thornleigh 2120. (02) 84 0268 for Easy Wheels, a rechargeable unit the motor of which goes on the head tube with the battery hanging from the top tube on a diamond frame or attached to a rear rack on other frames. The front wheel is driven by friction and the rider must pedal to start. Weight 9kg. Cost \$175 plus \$12 an hour or so for fitting. Warranty 6 months on unit, 12 months on battery.

Mike Marshall, 1 Punchbowl Road, Belfield 2191. (02) 642 4448 for rechargeable (though he doesn't recommend them unless you live on the flat and don't go far) and two-stroke units which mount on a special rear rack and drive the rear wheel through a second chain to a three or four-speed hub. The unit is Marshall's design and takes a week to fit with an extra week for a four-coat paint job. Cost is \$220 unpainted, \$225 painted. Weight 6kg. This is the only unit which doesn't fit in with a 10-speed bicycle. Warranty 3 months on motor, 12 months on rest.

The effect of a world wide energy crunch — an energy crisis, is about to affect the lives of all Australians. Fuel supplies have proved to be finite and are being rapidly used up by energy-hungry nations. Alan Parker suggests that a long-term increase in public transport usage is a big step towards conserving fuel which remains. However our present systems only serve a small percentage of the population. So he proposes dual mode — bicycles feeding public transport — as a creative approach to increasing the usage of transport systems, thus improving their effectiveness and efficiency. In the following pages Alan deals principally with dual mode travel as it applies to bicycle/rail travel. A future article will study dual mode bicycle and motor transport.



DUAL MODE TRANSPORTATION

MAKING PUBLIC TRANSPORT WORK

Bicycles are an untapped oil conserving resource that are being used by many Australians and many more would use them if better and safer facilities were provided.

It is obvious that bicycles can be used instead of the car for many short trips and help conserve Australia's limited oil reserves. However, far more oil is used for making long commuter trips, so the crucial question is how can bicycles be best used to replace the long car trip in urban areas.

Throughout the world the necessity to have national energy conservation policies is being realised and in many countries these involve transportation strategies that include the promotion of bicycling, bikeways and dual mode bicycle travel.

In the U.S.A., Japan and Europe it has been long realised that dual mode bicycle transportation has the potential to greatly increase the catchment area of public transport corridors. In some of these countries, rail and bus operations do provide for this form of travel and in the U.S.A. federal funding is now provided in the form of Mass Transit

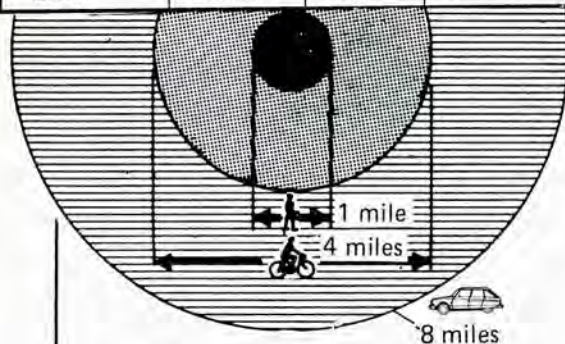
grants to encourage the various forms of bicycle dual mode transportation.

Dual mode transport planning is about encouraging the use of bicycles to feed public transport systems or privately shared vehicles, on a 'park and ride basis' and about the carriage of bicycles on other forms of transport. The term 'dual mode' is used to describe a whole range of possible uses for bicycles in conjunction with other vehicles. For example bicycles can also be used with shared vehicles such as cars and mini-buses and greatly increase the flexibility of private shared vehicle systems.

THE IN-BETWEEN MACHINE

For the same physical effort as walking, cyclists can get $3\frac{1}{2}$ times as far and cover 10 times the area. Using bicycles to feed the rail system increases the catchment areas of railway corridors 4 to 10 times depending upon the spacing of the stations. Typical catchment areas for 10 minutes of travel for pedestrians, cyclists and motorists in urban areas are shown below.

Means of Travel	Assumed Speed	Catchment Radius	Catchment Area
WALKING	3 MPH	0.5 MI.	0.8 SQ. MI.
BICYCLING	12 MPH	2 MI.	12.6 SQ. MI.
CAR	20 MPH	4 MI.	50.2 SQ. MI.



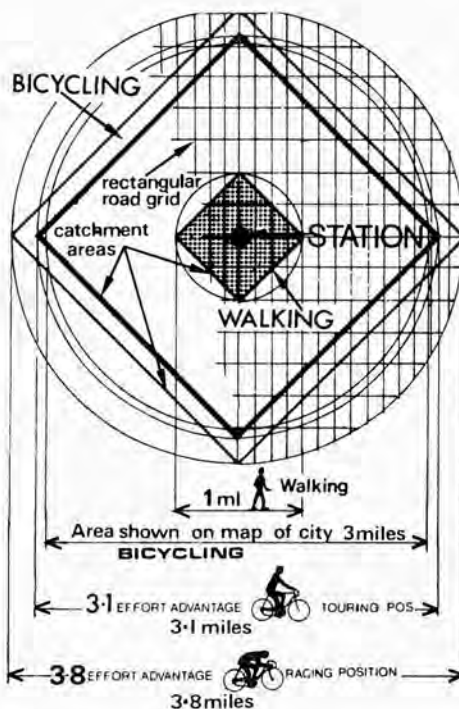
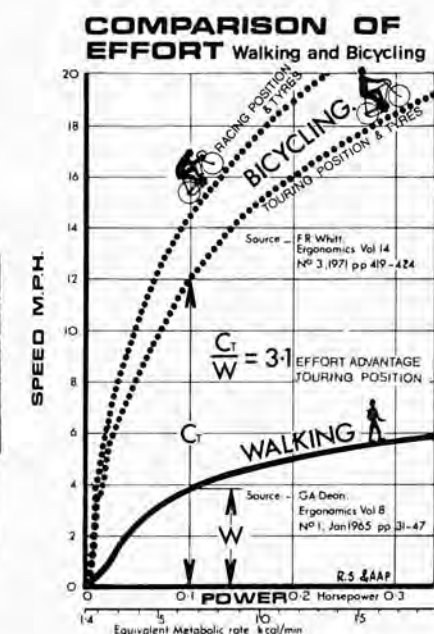
10 minutes Travel Time –
Catchment Areas.

Source: Bicycling in Tennessee
Planning and Design Manual 1975

Shopping centres, libraries, schools, are usually too far apart for walking, but most are near enough for bicycle access. The use of the bicycle enlarges the area of personal access sufficient for many purposes but with the conviviality of the pedestrian mode, because the cyclist can stop and talk to people and really experience the environment.

The diagram above shows that the bicycle is the in-between machine, that provides an alternative to pedestrian isolation on the one hand and motorised anonymity on the other. Of the home base car trips approximately 40% are less than 4 miles in the capital cities so that there is great potential for substituting bicycle trips for car trips.

The significant fact about cycling is not that it is $3\frac{1}{2}$ times as fast as walking but that it increases the area covered in the same time by as much as 9 to 14 times depending on the machine used and posture of the rider. For fold up bicycles with small dia. wheels which are slightly less efficient this increase would be between 8 and 9 times. Actual catchment areas for public transport in cities with grid street layouts will be more square than rounded as is shown below. Each section of the figure is derived from the section above it.



Station catchment area data for constant output of physical effort (0.1 Hp) for 7.6 min			
Data, FOR RECTANGULAR ROAD GRID	Walking	Cycling	Car
EFFORT ADVANTAGE	1.00	3.15	3.82
SPEED MPH	3.80	12.00	14.30
DISTANCE MILES	0.50	1.55	1.91
CATCHMENT AREA SQ MILES	0.50	4.80	7.30
CATCHMENT ACCESS RATIO	1.00	9.60	14.60

BICYCLES & TRAIN DUAL MODE

Dual mode bicycle transport on rail systems is concerned with two forms of dual mode travel.

The first is the use of bicycles to and from stations at one or both ends of a journey and this is by far the most common at present. The second is the use of standard large frame bicycle or portable fold-up bicycles carried on the train. The standard bicycle is limited to off peak hours due to its bulk, but the portable fold-up bicycle has great potential for carriage by rail in the peak hour. Several types of these bicycles are widely available, including two that are fitted with bags the bicycles are put into. Using bicycles to feed the public transport system in Melbourne, Sydney, Adelaide, Perth and Brisbane is a practical substitute for many, but not all, long urban commuter trips.

Irrespective of improvements to the rail system, such as the underground loop, more stations, grade separated crossings, improved rolling stock and more frequent services, the major impediment is that the rail services do not go where people want to go.

In a low density area such as Melbourne only 15% of Melbourne's population is within convenient walking distance of a station, but 85% of Melbourne's population is within convenient cycling distance, as is clearly shown in the map.

A PERSONAL EXPERIMENT

Living in a typical Melbourne "middle" suburb as a pedestrian I have access to only one rail line, leading south east and north to the city and the primitive bus services do not allow convenient access to others.

Using a bicycle, three rail lines are accessible in 3, 8 and 14 minutes' easy cycling, enabling commuting trips of over 10 miles to be made all over the Melbourne metropolitan area. I have found the use of two bicycles to be necessary in most cases for maximum convenience. One bicycle has to be a fold-up machine, that can be left overnight at the stations in the parcels office as most stations will not store large bicycles. Using two bicycles is a very flexible system.

After 3 years of experimentation with this dual mode form of transport I have concluded that it is far more convenient than using connecting bus services for several reasons.

Firstly, connecting bus services are only available at some stations and even when available only cover part of the potential 3 mile diameter catchment area.

Secondly, many fail to connect with

the trains and are allowed to regularly run early or late.

Thirdly, many of the buses don't operate on the weekends or out of the peak hour, so working weekends or overtime at night become a travel problem. Another important factor is that as a pedestrian working in a suburban location I can't get odd jobs done at lunchtime because I have no car or bicycle and the suburban services are so spread out and bus services cannot satisfy my needs. Some of these disadvantages are not common to bus systems as such, but most are an inherent part of bus systems with low levels of patronage.

In the off peak period, long social trips can easily be made, especially with a fold-up bicycle because often a partly folded bicycle can be put in the boot of a taxi and the cyclist can get home at any time of night.

ENCOURAGING CARS IS NO SOLUTION

Encouraging the use of cars to feed the rail system is very wasteful of resources, unless parking places are reserved for shared car users. In Sydney parking space is tying up millions of dollars of assets in providing room for space-consuming car parks. Studies done in Victoria by Waverley Council of railway users who park their cars at or near the three stations at the eastern end of the Glen Waverley line show that 50% of them travel less than 1½ miles to the station. Most cyclists, being able to park nearer the station, would be able to get to the station nearly as fast as the motorist for trips of 1½ miles and under and would not create a parking problem as 16 bicycles can be parked in the space of one car.

There seems to be no understanding of the simple fact that, existing rail services have to be improved, otherwise railway patronage will continue to fall. For instance, many of the existing rail patrons are "floating commuters" who, like the floating voter, come and go but could permanently be hooked on using the train, if they started using a bicycle to get them to the station much more quickly and conveniently.

As a rough rule of thumb, there are more railway patrons further than 6 minutes walking distance than there are patrons who walk for less time. Up to about 12 minutes walking the number of passengers is proportional to the square of the distance, as figures 1 and 4 indicate.

Beyond 12 minutes' walking distance the number of rail patrons rapidly declines and very few walk more than 20 minutes. There is very little exact data on this but it seems obvious that the majority, who walk 6 to 12 minutes to a

station may want to use their car to save time on a regular basis or when they are late for work. Enabling them to use a bicycle for this purpose is very convenient.

Bicycle dual mode transport, given the infrequent rail services prevailing today, cannot compete with the private car on a time basis. However, compared with trying to use public transport without using a bicycle, it is an enormous improvement. The level of service provided by public transport systems in the middle and outer suburbs of the large Australian cities is so bad that no-one will use these services unless they have to — which seriously disadvantages a whole section of the population.

A major shift towards public transport over a ten year period, would give the able bodied adult, using the dual mode form of bicycle travel a level of convenience similar to that of the car; The significance of dual mode bicycle travel lies in this long term potential.

DUAL MODE Storage systems



A double sided bicycle locker used on the Bay Area Rapid Transit System. This unit can be used in out of the way places and is very hard to break into, it also has the feature of denying the thief a view of what he might be stealing, which is an effective deterrent.

BEATING THE BIKE THIEVES

To "Park and Ride" at a railway station is simple for motorists, because built into a modern car is a lot of security features that are taken for granted. Fear of theft is a major deterrent to bicycle users and has to be combatted otherwise the potential of bicycle transportation will never be realised.

What is happening in Australia today is very similar to what happened in the United States five years ago. There has been a steady increase of adult bicycles in use and following in the wake of this increase has been a secondary increase in bicycle theft. Both of these trends are continuing here and according to the latest police figures recorded bicycle thefts will hit the 8,000 mark by the end of the year in Melbourne and this is only part of the loss because a large number of bicycle thefts are never reported to the police. What is happening in Melbourne is typical of what is happening in the rest of Australia.

PROFESSIONALS MOVE IN

According to a recent report in the *Melbourne Times* some professionals have moved in with bolt cutters that chop through the locks and chains sold by Melbourne's bicycle retailers.

According to a study of bicycle facilities prepared by the Commonwealth Bureau of Roads the basic requirements for bicycle storage are as follows:

The most important feature of an effective storage unit is that it secures both wheels and the frame. It is also highly desirable that bicycle storage units be under cover, as close as possible to cyclists' destinations and in clearly visible locations to deter petty thefts and vandalism.

What's wrong with the few storage racks at most public buildings is that they only lock the front wheel and sometimes that is the only part of the bicycle left in the rack after thieves have undone the front wheel nuts. The great cost saving in getting existing users who come by car to come by bicycle is saving in car parking which can cost between \$800 and \$3000 per car parking space depending on the location. Multi storey car parks average out at \$4000 per car parking space. The cost of new racks and installation costs should be no more than \$50 per bike parking space. Between 12 and 16 racks can be provided in one car parking space.

PAY LOCKERS

The double sided bicycle locker is an efficient user of space which can be linked to provide interesting layouts as is shown on the drawing, they can also be hired out to library users and commuters and will pay for themselves.

The drawings show a variety of bicycle storage facilities all of which are American and can be used as a guide to indicate what kind of equipment needs to be developed in Australia. What is lacking in Australia at present are more locally made products or agents to handle American products.

Those requiring further information should contact the Bicycle Institute of Victoria.

One drawing shows a locking device that is fitted to an existing car parking meter and one variation of which is a coin in the slot machine and several other types of locking units are available.

The rack above is the simplest device being based on a post with a heavy duty case hardened chain or hardened through chain attached.

A heavy duty lock with a 3/8 dia. hardened hasp, is all bicyclists would have to carry and even this can be protected from the bolt cutter by a device attached to the end of the chain known as a lock protector, into which the users lock fits.

SECURITY AND DESIGN LIFE

Within the predicted design life of the bicycle storage facilities installed now and in the future, they will be attacked by professional thieves. Therefore it is imperative that bicycle storage facilities be tested out and developed to meet this problem, so that in future all public transport operations can use the designs and specifications developed to cater for the changing needs of their users.

MARKETING DUAL MODE TRAVEL

The promotion and marketing of bicycle dual mode is a relatively inexpensive means of increasing public transport usage, and an examination of the detailed benefit/cost analysis made in the Geelong Bike plan leads me to believe that over a 15 year period a benefit/cost ratio of at least 6:1 would apply.

Given the ongoing changes in people's attitudes towards personal exercise, the environment, pollution and other issues, a marketing programme selling the environmental benefits of using bicycles and public transport should generate enough increase in rail patronage to pay for itself on an ongoing basis.

Dual mode travel is one of the areas defined as needing future study by the full time bicycle planning group set up by the Victorian Ministry of Transport. In any case the prime responsibility for this planning work should rest with Victorian Railways and MURLA. It is also their responsibility to investigate an idea which has proven itself in European countries, is hiring out bicycles from stations for various purposes.

A low cost unit that is highly effective because it locks the frame and rear wheel at the same time, an optional extra feature of a coiled wire allows the front wheel to be locked as well. This rack has the important feature that the cyclist needs only to bring a lock to use it.



Good quality machines can be imported for as low as \$70 each, provided that they are imported in minimum lots of 200. It should be possible to make arrangements similar to this with Australian Manufacturers for large discounts on large orders. The Bicycle Institute has obtained quotations for the supply in quantity of good quality fold up bicycles from Germany, so the savings that could be made are not merely one of conjecture.

The most important factor in encouraging bicycle dual mode travel once the physical planning has been done and secure storage facilities made available, is selling the idea with the kind of skill

normally associated with private enterprise marketing campaigns and occasionally indulged by Government agencies, such as the *Life Be In It* Campaign in Victoria. So far increases in adult bicycle useage has taken place, despite the lack of facilities and lack of hard sell.

The central argument for the creation of a dual mode transport system, less wasteful resources, particularly oil, is supported by the other arguments that have considerable force.

(1) ELIMINATION OF SOCIAL VIOLENCE

In the last ten years, 40,000 Australians have died violent deaths due to the use of the private car. Bicycle dual mode travel overcomes this because buses and trains are so much safer per passenger mile than car travel and a short trip to the stop or station by a cyclist is a minimal ammount of exposure for the cyclist.

Ten miles by car is much more of risk than one mile by bicycle and 9 miles by trains despite the higher accident per vehicle mile by bicycle. The overall improvement in the public transport system that widespread bicycle useage would make possible, would reduce the amount of motoring done and more people would use the public transport system. This is the most important contribution to transport safety than can possible be made because railways are over thirty times safer per passenger mile. Bicycle dual mode transportation is the starting point for the creation of a non-violent transportation system.

Cycling itself can be made far safer and the Geelong Bike Plan gives a comprehensive means of doing this using engineering improvement, educational programmes and the correct enforcement of road law combined with the encouragement of cycling.

(2) ENVIRONMENTAL BENEFITS

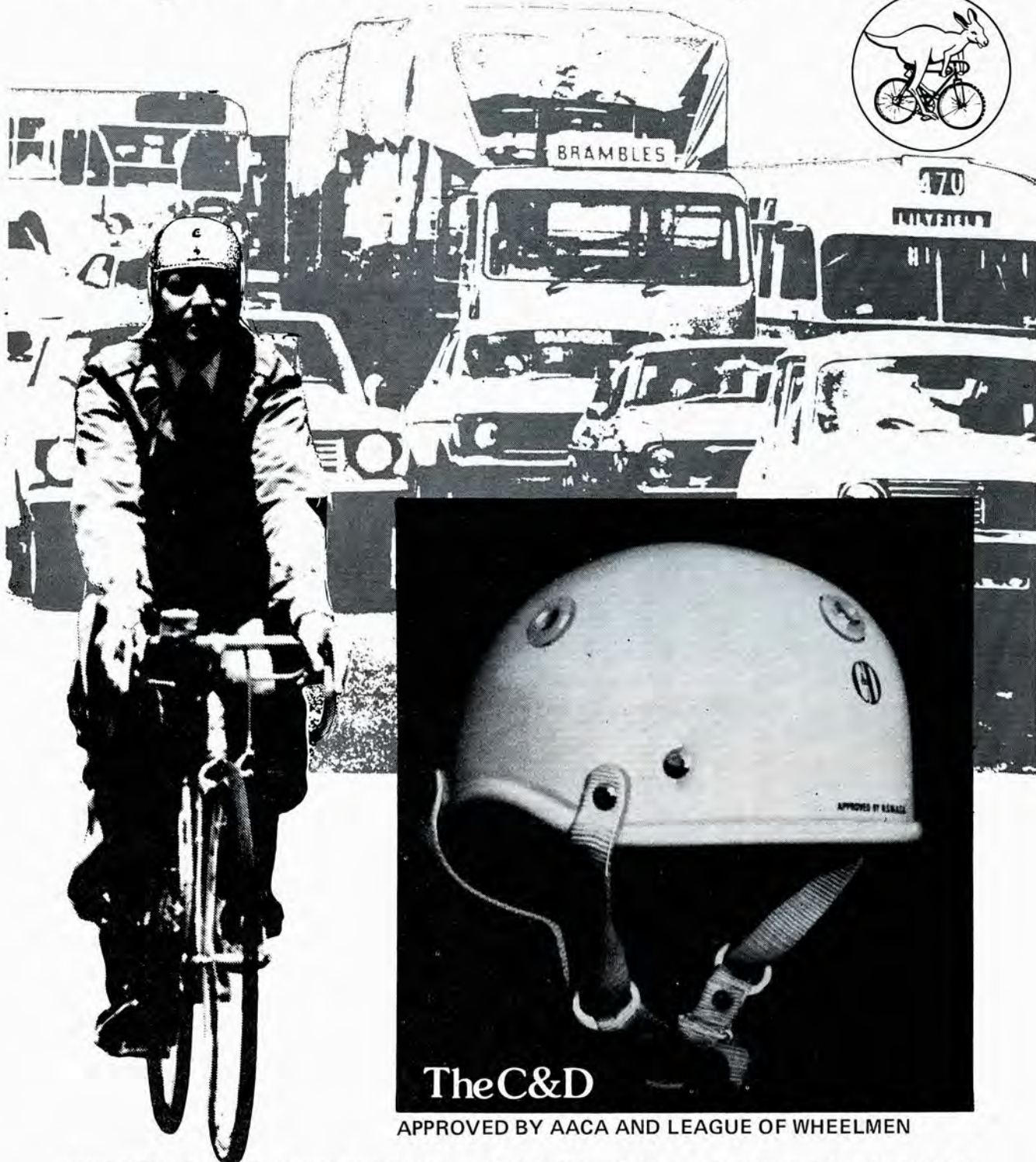
The system outlined would in ten years greatly reduce air and noise pollution, reduce noise levels, conserve open spaces from being vandalised by freeway builders and generally bring about a more convivial street life, as more and more people walked and cycled instead of being locked into an anonymous tin box.

(3) SOCIAL EQUITY BENEFITS

The systems proposed will greatly increase the accessibility of public transport services to the able bodied section of the community that does not have access to a car. The carless unemployed will be able to gain access to a greater number and range of jobs and carless young adults will be able to move around much easier.

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FREEWHEELING 13

The Bicycle and the Australian Shearer

by Jim Fitzpatrick

Previously published in *Hemisphere* June 1978

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*Two shearers, Robert and Francis Lyon, of Tasmania,
at Deniliquin, NSW circa 1910.*

The pneumatic-tyred safety bicycle, available in Australia from the early 1890s, was important in the inland. And nowhere were the utility and value of the bicycle more apparent, more convincingly demonstrated, and more accepted than among the country's shearers. From the 1890s to about 1920 large numbers of rural travellers adopted the bicycle for moving around the country.

The shearers' travel alternatives across the expansive, hot and arid continent were limited, and generally slow. They could walk, ride a horse or a horse-driven

vehicle, or in some circumstances use camels. A small railway network penetrated only a few areas. Water-borne travel in the interior was limited to the Murray-Darling system in the southeast. In either case the rural traveller had vast spaces to cross. Motor vehicles, although introduced into Australia by 1900, were initially extremely expensive. Also, in many rural areas petrol, repairs and parts were often impossible to obtain. In addition, the harsh nature, even lack, of Australian roads and the reliability problems of early motor vehicles made their use questionable. It was not until

after the first world war that they were generally feasible and commonly available for rural transport.

In this context the bicycle proved an excellent means of transport for shearers and related workers, who would travel many thousand kilometres a year during the course of a shearing season. For one thing, the bicycle was extremely fast. A cyclist could commonly travel two to three times as fast as a horse or camel in most rural conditions. By 1898 bush cyclists had ridden across the Nullarbor from Fremantle to Adelaide in as little as eighteen and a half days, and from Darwin to Adelaide, three thousand kilometres, in only twenty-eight days. But more important, the bicycle was particularly suited to the shearers' work style. After several days or weeks of shearing the men were extremely fit and capable of mounting the machine and immediately pedalling off on a one-day ride of 150 kilometres or more. In contrast neither horses, possibly unexercised and poorly fed, nor walkers could remotely approach such performances.

The bicycle had been widely used throughout Western Australian goldfields beginning at least in late 1892, and by 1900 numerous riders had criss-crossed the continent. By mid-1895 at least one cyclist had demonstrated the mustering and boundary riding potential of the machine to southwestern Queensland pastoralists. Occasional property owners eventually experimented with their own bicycles. The first known reference to the bicycle's use by shearers dates from about mid-1897, by which time a rider had reportedly covered three thousand kilometres in the New South Wales interior. Two months later four shearers were cited as 'careering from station to station' on their bicycles.

The sudden focusing of attention upon cyclists in pastoral areas led to a cartoonist of the weekly *Bulletin* to suggest the eventual extinction of the horse, and E.S. Sorensen, in a typical *Bulletin* reaction to all cycling matters, to pen 'The Bicycle's Gone to the Bush':

*It's all up the tree with the swagmen,
It's all over now with the tramp,
And the horsemen can dally with bagmen,
For they're wanted no more on the camp.
They're trooping in droves from the west-track,
with tidings of woe to their push,
For the inside, they say, is the best track,
Since the bicycle's gone to the bush.*

*On the stations out back they are riding
'Long Boundary and rabbit-proof fence;
And rouseabouts swiftly are gliding
With shearers and tank-seekers hence;
They're rounding up sheep and scrub-cattle,
They stem the most desperate rush —
E'en the Myalls will pedal to battle
On the bikes that have gone to the bush.*

Despite such tongue-in-cheek attitudes, the bicycle was increasingly adopted by shearers over the next few years. A crucial factor in the rate of acceptance, aside from the machine's speed, was that the bicycle required neither food nor water. In the drought-prone rural Australian environment, also plagued in some areas with poisonous plants, the machine proved a blessing. During the years 1895 to 1903, in particular, Australia suffered from the most severe drought in its recorded history. Nearly half the sheep and cattle in the country were lost. Wells dried up and forage was depleted over large areas. In some places fees were charged for drinking-water for livestock, although men could drink for free. So it is no wonder that shearers chose the rapid, human-engined device.

There were problems, of course. Many thorny plants sometimes played havoc with tyres. These plants were known variously as 'bindy-eye', 'prickly-jacks', 'double-gees', 'goatsheads', 'galvanised burrs', 'giant bulls heads', and 'three-cornered jacks', among others. However, riders were also plagued by rocks, ruts in the roads, stone chips, glass, nails, stumps, roots and other road hazards. Yet, the thorn-proof tyre, developed by Dunlop, was very effective in resisting puncturing. Although thicker, and hence heavier to push than the normal roadster tyre, the thorn-proofs were well worth the effort in many parts of the continent. There are numerous records of cyclists riding thousands of miles with only one or two punctures, often none at all. Rather than being the weak link in the bicyclist's equipment, the resiliency and relatively low rolling friction of the pneumatic tyre and the puncture resistance of the thorn-proofs were what made the bicycle ultimately feasible for extensive rural use.

The extent of the bicycle's use was described by a journalist during a trip through western New South Wales in 1909. He likened the shearers to a flock of galahs moving across paddocks, and 'the sign of them was their bicycles', which 'had spread through the country as fast as the rabbit. It is extraordinary in what unlikely places one finds those tyre-tracks'. While many shearers did prefer to walk or use a horse, eyewitnesses suggest that over half the shearers used bicycles early this century. In some areas former shearers have indicated that virtually everyone in the shed mounted them. The use was so integral with the shearing scene that the New South Wales Pastoralists' Union's Shed Hands Agreement eventually included a clause requiring property owners to provide bicycle sheds as well as food, bunks, and other amenities for the workers.

An excellent illustration of the use of the bicycle is provided by a group of Tasmanian shearers who worked the

A Dunlop advertisement from early this century.



To Shearers —

Thousands of you now ride from Station to Station on DUNLOP shod cycles, because you find these are the **ONLY TYRES** that give satisfaction. We have now issued a special strong and heavy Cover, known as the "Thorn-proof," which is splendidly adapted for the riding you do. They cost a little more, but they are well worth it.

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will practically ensure you against punctures, and will carry you thousands of miles without trouble. We will be pleased to forward you a section of this Cover upon receipt of your name and address. These Covers can be obtained through any reputable Cycle Agent. They are branded "Thorn proof."

DUNLOP RUBBER CO Melbourne Sydney, Adelaide, Perth, Brisbane, Christchurch, N.Z.



eastern states' circuits. The two gentlemen pictured at Deniliquin, circa 1910, were part of a group that annually left Tasmania in early March. They returned home by about the beginning of October for the Tasmanian season. The group took a boat to Melbourne, then the train to Wagga. They carried their bicycles with them both ways, stocking up on perishable foods on the mainland.

The men travelled as lightly as possible, for the head-winds, dirt roads, tracks and soil over which they pedalled required much effort. None the less, for a several-month journey, their machines were heavily loaded. They carried canvas water bags (weighing one kilogram per litre), billies, bedding, clothing, and repair-kits. The latter normally included some chain links,

spokes, tubes, puncture repair kit, pump and tools. Bedding consisted of rough grey blankets and a rug. Food was carried in a canvas bag hung within the frame; waterbags were also commonly carried there. Bulky bedding was tied over the back wheel. Smaller and lighter bundles, such as clothing, were commonly secured to the handle-bars or forks. A touch of home was provided by the 'Tasmanian Bluey', a blue-grey all wool overcoat that doubled as additional bedding.

Each year they covered several thousand miles in their cycling journeys. The annual circuit took them to such places as Jerilderie, Narrandera, Yanco, Ivanhoe, Menindee, Wilcannia and Tibbooburra. Today these rides would be considered major cycle trips; for many shearers they were at one time but part of the work routine. As such, they were not

hesitant to accept assistance from hawkers or teamsters. The opportunity to throw the load on to a waggon and ride or walk unencumbered for a while was welcomed. At the end of the season the men returned to Tasmania to continue shearing. Those long, dusty, hot rides in the Riverina and beyond were replaced by short jaunts in a land of greenery for a while. Next year, however, it would begin again. For this particular group the annual pilgrimage continued from the turn of the century until the first world war. For several of them service with the armed forces meant the end of the routine; and for some of them, life itself.

The bicycle obviously radically altered the workers' perception of time and distance. In South Australia one group of shearers could get in some extra work each year by using it. They pedalled the five hundred and forty-two miles north along the Strezelecki Track to shear a couple of sheds in south-western Queensland prior to returning to their home districts for the local season.

In retrospect perhaps the most fascinating aspect of the shearers' use of the bicycle is the extent to which the situation has generally gone unrecorded. As a result, few Australians today are aware of the past usage. And, surprisingly, when the cyclist was nearly ubiquitous, few ever bothered to write about him. 'Banjo' Paterson, for example, only wrote one poem concerning rural cycling, and that lampooned a horseman's inability to master the machine. And yet Paterson photographed a squad of bicycle-mounted strike-breakers in Coonamble in 1902 and, as a result of his travels, could not have failed to notice its prevalence in other situations. And rare is the history book that even mentions bicycles in a discussion of rural travel; those few that do dismiss the bicycle in a few sentences.

In a country long enamoured with the rural image, characterised by the stockman, an apparently incongruous technical device like the bicycle may have struck a wrong note or, more likely, no note at all. Probably those who wrote of the land, the people, and the way of life had pre-coloured visions of what they would see. Unquestionably there are always romantic, striking and highly publishable things to say about the man mounted high 'on a stallion as fleet as the wind'. But the bush biker, sitting at eye level, with an inanimate machine 'looking like an overloaded towel horse', was he that much less imaginable? The degree to which the shearers and other rural cyclists have been ignored is worth speculating about. To explain why is to demonstrate a real grasp of Australian culture.

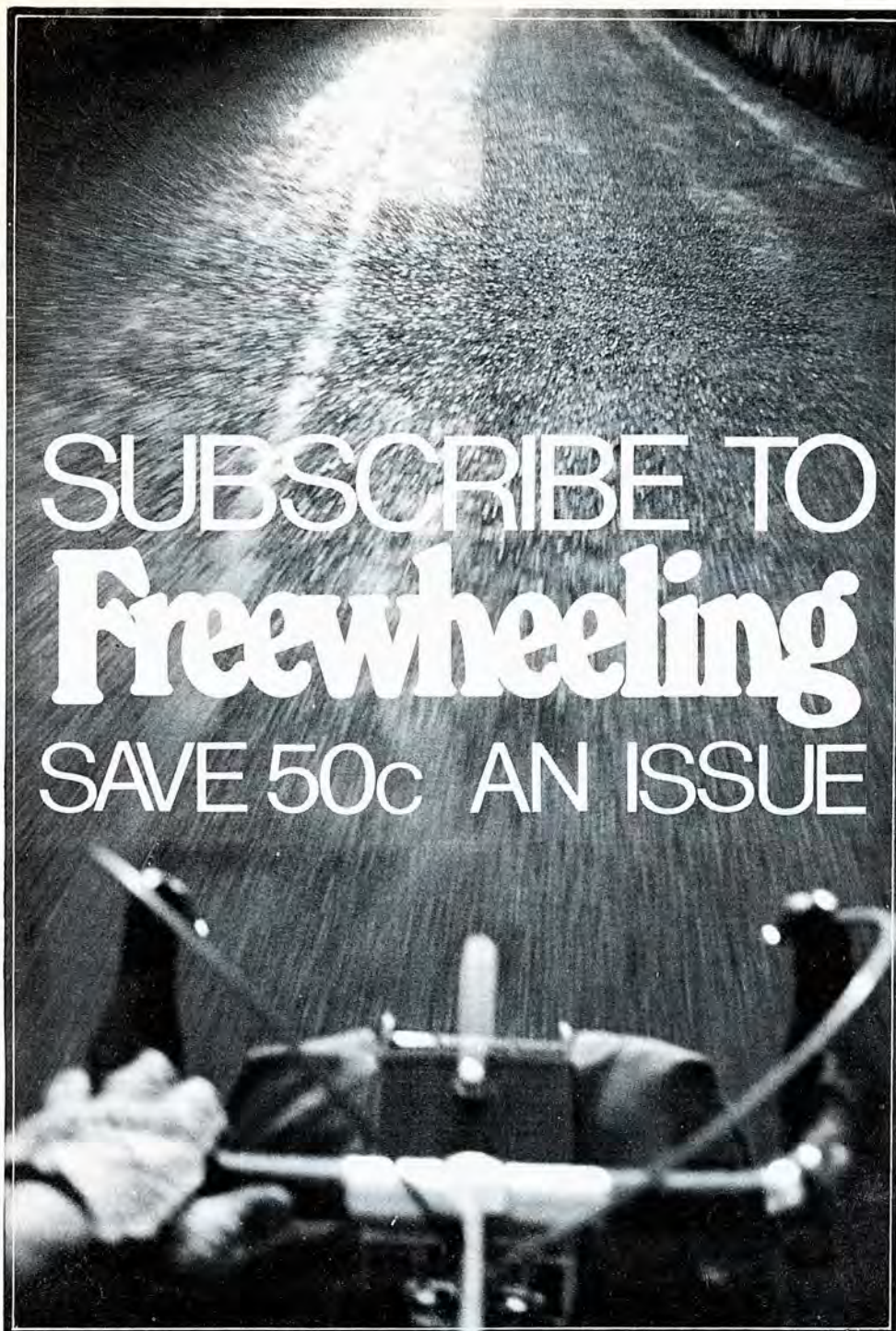


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Geelong Bike Plan: At last recognition for cyclists. Contains the detailed summary of Australia's first major bike plan. 8pp magazine format. 20 cents

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Sydney and the Bush: A guide to the Central NSW section of the East Coast Bicycle Route — Maitland to Goulburn. Covering directions, camping areas, food supplies and access to Sydney. 12pp magazine format. 50 cents.

Freewheeling

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'Sydney and the Bush'

A Freewheeling Australia guide to the EAST COAST BICYCLE ROUTE Central NSW section

If, hopping on your bike to travel to another city along the east coast 'people' belt of Australia is ever your dream and desire then this guide is for you.

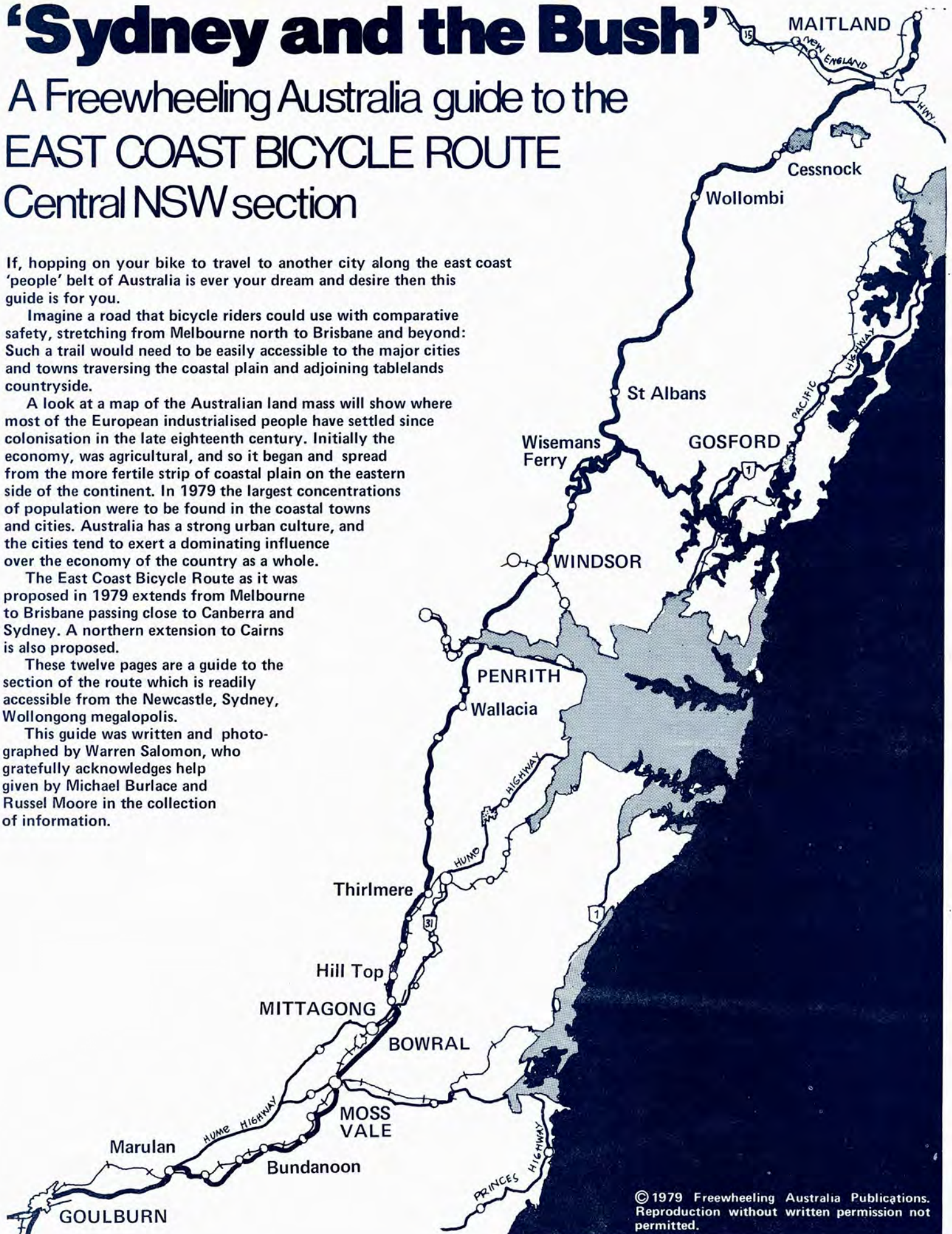
Imagine a road that bicycle riders could use with comparative safety, stretching from Melbourne north to Brisbane and beyond: Such a trail would need to be easily accessible to the major cities and towns traversing the coastal plain and adjoining tablelands countryside.

A look at a map of the Australian land mass will show where most of the European industrialised people have settled since colonisation in the late eighteenth century. Initially the economy, was agricultural, and so it began and spread from the more fertile strip of coastal plain on the eastern side of the continent. In 1979 the largest concentrations of population were to be found in the coastal towns and cities. Australia has a strong urban culture, and the cities tend to exert a dominating influence over the economy of the country as a whole.

The East Coast Bicycle Route as it was proposed in 1979 extends from Melbourne to Brisbane passing close to Canberra and Sydney. A northern extension to Cairns is also proposed.

These twelve pages are a guide to the section of the route which is readily accessible from the Newcastle, Sydney, Wollongong megalopolis.

This guide was written and photographed by Warren Salomon, who gratefully acknowledges help given by Michael Burlace and Russel Moore in the collection of information.



Maitland-Penrith

Abandoned church, Bishops Bridge.

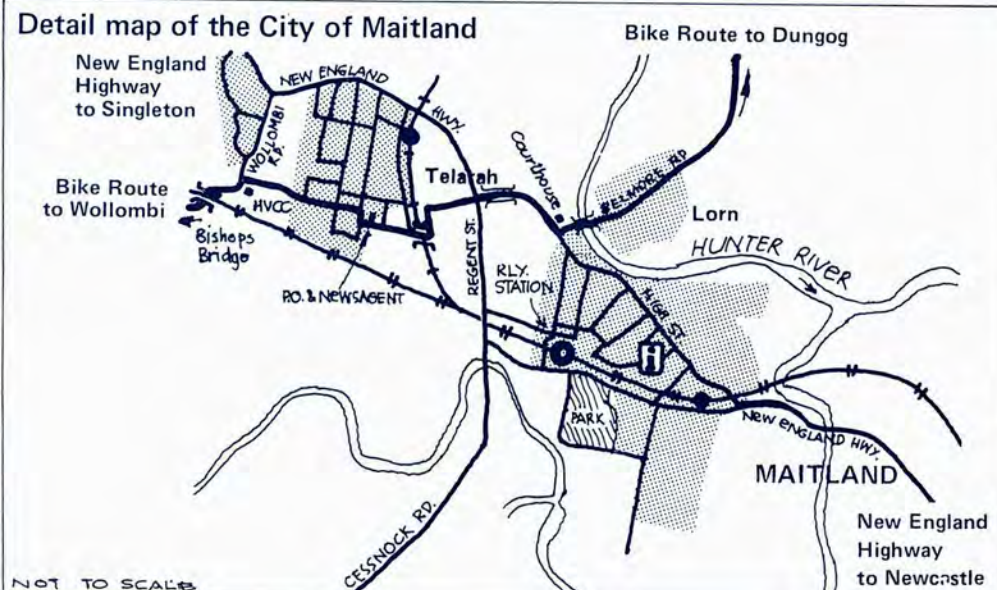


Sign at Cessnock.



Leaving Maitland heading south.

Detail map of the City of Maitland



This guide has a natural north to south bias.

The State of New South Wales has often been described as consisting of Sydney and the bush. The influence of Sydney on the rest of the state is enormous and most of the industry, commerce, general activity, and **traffic** in this area is oriented towards the huge and sprawling Newcastle — Sydney — Wollongong megalopolis.

This section of the bike route traverses the Hawkesbury sandstone country to the north west of Sydney. Because of its rugged nature it has limited the growth of the megalopolis to the narrow coastal plain to the east of it. The sandstone has its origins in antiquity as possibly a river delta area — an offshoot of the Great Artesian Basin. Over numerous centuries parts of this vast sandstone deposit have been pushed upward, cracked, faulted and eroded. This high country was a limitation to early European settlers' ideas of expansion from the lower Cumberland Plain upon which the cities of Sydney, Parramatta and Penrith are now built.

The first constructed roads from the colony of Sydney pushed northwards inland through this labyrinth of valleys and canyons to the Hunter River Valley. It was quite some time before the coastal route became preferred and nowadays these old roads offer wonderful bicycling country.

Between Maitland and Cessnock there are two possible routes. The heavily trafficked, fully-sealed route through Kurri Kurri and the partly-sealed but quieter route through Bishops Bridge (called The Wollombi Road). Both of these routes are over undulating Hunter Valley countryside.

The large town of Cessnock is situated north of the high sandstone country. Between here and Wollombi there is a good bitumen road. This climbs over the low southern edge of the Broken Back Range in the vicinity of Pelton. There is no great climb involved (200m net) and grades are long and slow. The section from Millfield to Wollombi follows the north arm of the Wollombi brook **downstream** to the village. This is all good bitumen with easy grades.

Not far from the hotel at the road junction along the Singleton road is a picnic/camping reserve which makes for a pleasant stop over point.

Between Wollombi and the top of the range (shown on some maps as Mt McQuoid or Bucketty) there is a very bad unsealed section. As this road is maintained by the Department of Main Roads (DMR) it is hoped for the safety of all road users, particularly more vulnerable ones like bicycle riders, that it will be sealed as quickly as possible. If you experience difficulties a letter from you in their direction would help. Most of the

traffic on this road (and there is a lot on weekends) is travelling between Peats Ridge and Cessnock or Singleton and beyond. There is very little traffic between the Mt McQuoid turnoff and St Albans and this road has a good unsealed surface.

Steep climbs are necessary to reach Mt McQuoid. The climb to the north of the turnoff is sealed and makes for a fast downhill travelling northwards. There is a smaller but equally steep climb on the gravel road approx. 3-5km north of where the bitumen takes over.

Approximately 5km along towards St Albans from Mt McQuoid there is an old gravel road joining in from the south. This is the old convict-built Great Northern Road and is presently (1979) being restored as a recreational road by the NSW Planning and Environment Commission. It is hoped that when this road is reopened the main bike route will take this path to Wisemans Ferry.

At the bottom of Mogo Hill you may find a fruit and vegetable stall open for most of the warmer months.

Between the end of the bitumen mentioned above and the next sealed road north of Wisemans Ferry the road has a sandy surface which can turn soft and slushy in heavy weather. These roads do dry out quickly after the rain stops.

The village of St Albans is situated on the MacDonalld River in a valley with magnificent sandstone cliff walls towering above it. You can still see most of the

Key to maps

Distances shown between centres thus:



Distances between larger centres

Camping



Bike Route (sealed)



Bike Route (unsealed)



Other roads



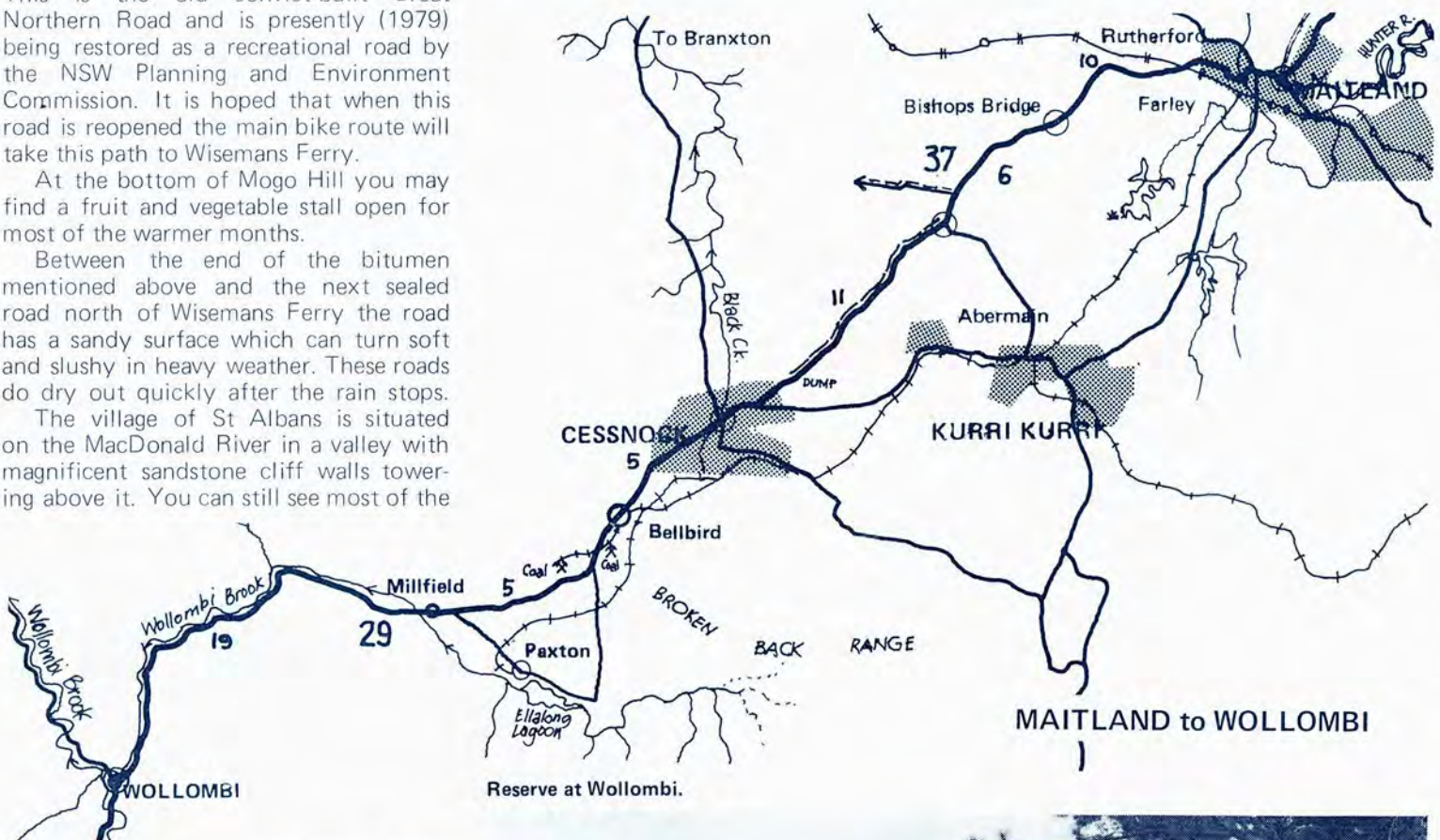
Railways



Built-up areas

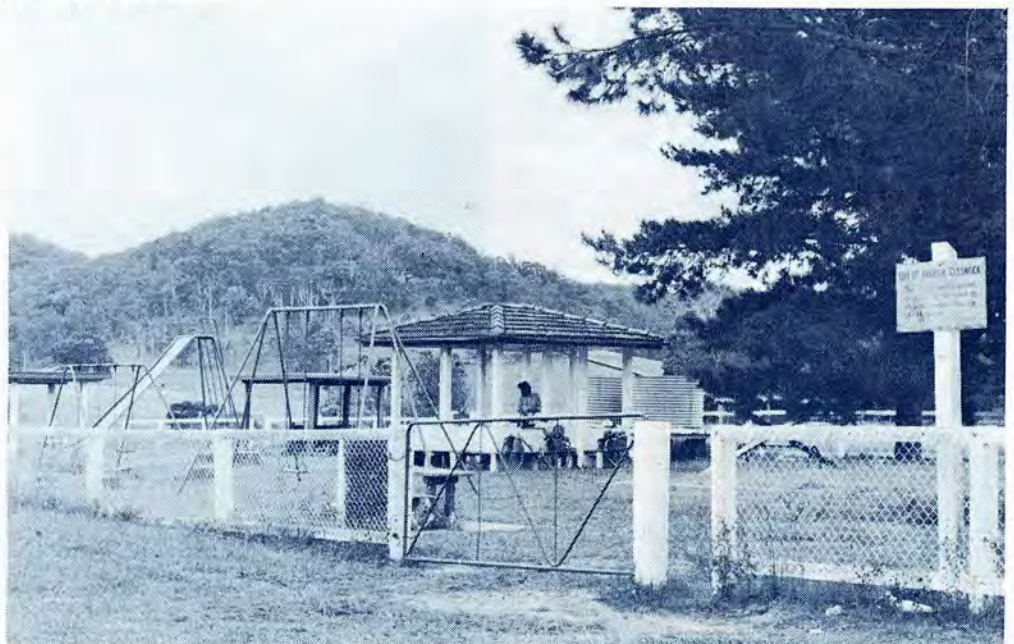


The main maps in this guide are drawn to a scale of 1:250000 ie 1 centimetre = 2.5 kilometres



stars at night if you camp here. Across from the Settlers Arms (the last hotel in the area) there is a small camping reserve. During weekends this can be overrun with picnickers. Water and showers (fee) are available from the hotel, but as this is from tank supplies the publican will not want to give you more than you need.

There are two choices of route between Wisemans Ferry and St Albans, both follow each bank of the MacDonalld river. At the time of writing the shire maintained eastern bank road had a greater portion of sealed surface than the DMR road on the west bank. The roads are approximately the same length and have rough patches especially after heavy rains. The whole valley is steeped in white colonial history as the MacDonalld has been settled since the early 1800s.



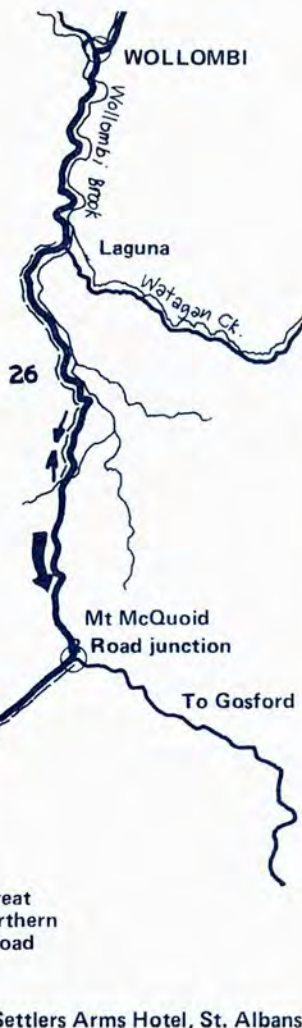
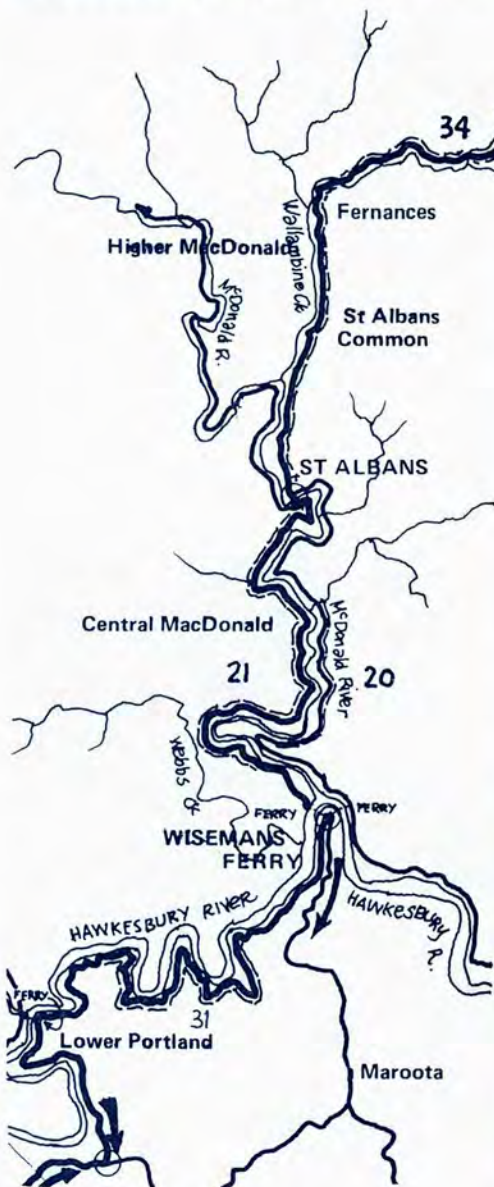
The settlement of Wisemans Ferry has a shop, post office and a pub. The food prices are slightly high. (Solomon Wiseman lives!) and the orientation is towards the passing motor traffic.

The Hawkesbury River is a magnificent sight to behold. It's a genuine **big** river. In flood times the DMR-funded road ferries often get washed down-stream. Such a volume of water rushing past. All of the water falling on the eastern Blue Mountains, Cumberland Plain, Woronora Plateau and Southern Highlands, an area within a 100km radius of Sydney and as far south as Goulburn, eventually flows into the sea via the mighty Hawkesbury River. Most of the time though it is placid and broad.

Between Windsor and Wisemans Ferry the main bike route follows the river as it flows through the massive channel it has cut into the high sandstone country which was probably uplifted slowly over many centuries.

Sackville marks roughly the southern

WOLLOMBI to WISEMANS FERRY



edge of this high country. Upstream (south) of this point the Hawkesbury flows across the flat Cumberland Plain at the foot of the uplifted Blue Mountains Plateau to the west. The route from Wisemans to the Sackville ferry via Lower Portland can only be described as magnificent. It is hard to take one's eyes off the river and concentrate on the road. In parts the road demands this as the gravel section is rough and sandy in patches around side-creek crossings. Most of the distance is over bitumen. There are rock over-hangs quite close to the road in parts.

Steep climbs are to be experienced up from the Sackville ferry heading north and up from Lower Portland heading south. At the top of this hill is the turnoff to Wisemans Ferry via Maroota. This bitumen road is a quicker but less scenic alternative to the Lower Portland route. One more alternative for the Windsor to Wisemans Ferry section is the main bitumen road through Pitt Town and Cattai. Both of these alternatives have considerably more traffic and both include the Wisemans Ferry hill which is steep, winding *and* has lots of traffic especially on weekends. It's great to come down it though and spectacular high views of the river can be had from the top of the ridge.

Between Sackville Ferry and Windsor you will encounter progressively more motorised traffic. You're in the suburbs





Macquarie Park, Windsor. Hawkesbury River
— bridge in background.

now. The land flattens out from the high sandstone in the north to become the alluvial flats of the Hawkesbury/Nepean River and the Cumberland Plain, the province of the city and the suburban lifestyle. At Wilberforce you will meet the Putty Road, the high speed exit to the northern cities and towns. The DMR road between here and Windsor is wide and well maintained. A quiet alternative cuts over the back of Wilberforce and leads down to the river to join the road from Freemans Reach to Windsor, which joins the Putty Road at the bridge before Windsor. The caravan park here is an OK place to camp. It's such a shame that campers are ignored by caravan parks but at this one you can generally find a place overlooking the river with the early colonial town of Windsor at your door step. Camping next to the Putty road can be a bit noisy though — but you are after all in the city now or at least within its influence.



WISEMANS FERRY to WALLACIA

Windsor has a heavy National Trust presence. The town has a nice feel to it. Its main street is George Street which skirts the railway station. There are regular trains from here to Sydney via Blacktown (change to electric train at Riverstone).

When approaching Windsor from the south the main traffic route veers to the right while George Street is straight ahead.

Heavy trucks may be encountered between here and Penrith. The road through Cranebrook is a good bicycle road. Not much traffic and good views over the flat plain of the Nepean River to the famous Lapstone Monocline looming up to the west. The city sprawls up onto the Blue Mountains from here and gravel mined from the river binds the concrete for the city.

It's funny how when long distance bicycle riders roll on into town everyone heads for a park or open space close to the centre of town. Penrith has a well manicured one within easy reach of all shops and facilities. It's about a kilometre east along the Great Western Highway (High Street) from its intersection with the bike route.

The route between Windsor and Penrith is all bitumen with varying widths and traffic volumes. There is probably a caravan park in Penrith but the camping area at Wallacia 18km to the South-west is better.



ACCESS

Rail: Regular Sydney suburban service to Penrith and Windsor. Good country service. Maitland to Sydney and suburban (Newcastle) service daily.

Camping: Parks and caravan parks in EAST MAITLAND off New England Hwy. WOLLOMBI: Picnic and camping reserve in town. ST ALBANS: Reserve opp. Settlers Arms. WISEMANS FERRY AND RIVER: Numerous caravan parks usually frequented by water skiers in Summer. WISEMANS FERRY/DHARUG NATIONAL PARK: Good national park campsite off road to Central Mangrove & Peats Ridge about 5km from lower ferry at Wisemans. NB. All sites around Hawkesbury region are sometimes crowded during summer holiday periods. CATTAL CREEK (Choice of three caravan parks): Bungool Park Wisemans Ferry road, Mitchell Park 11km north of McGraths Hills, Caddie Crk Camp area. 5km from creek bridge. WILBERFORCE: The Butterfly Farm Caravan Park on Windsor Road. WINDSOR: Macquarie Park on northern side of river from Windsor. Noisy but nice. WALLACIA: Blaxland Camping Ground on river in pleasant surroundings. Recommended. OTHERS YOU'VE FOUND

Supplies: Maitland, Penrith, Windsor and Cessnock have larger stores and all kinds of supplies. Supplies can also be obtained from shops in Wollombi, St Albans, Wisemans Ferry and Wilberforce. There are numerous road-side stalls during the warmer months close to busy roads. **Cafes and eateries:** Can be found in Maitland, Windsor and Penrith.

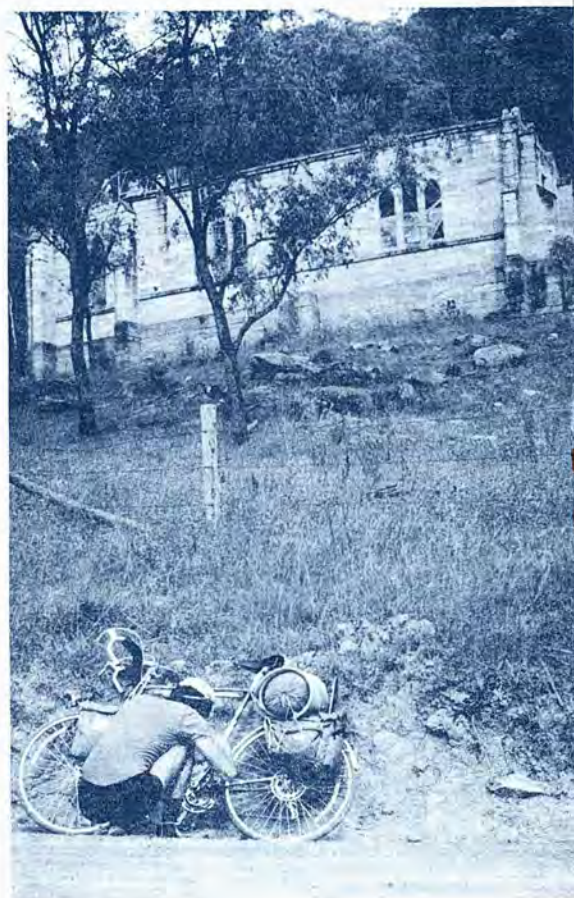
Bike Parts and Supplies: PENRITH, two shops in High Street. WINDSOR shop in George Street. There are sports stores (limited parts) in Maitland and excellent bike shops down the line in Newcastle. Refer *Freewheeling Australia 1/78* for complete NSW list of shops.

INFO: There are good tourist info centres at Maitland, Windsor and Penrith.

Habits and Customs: The area is heavily *five day working week/two day weekend* — oriented. Some places are not open on weekends while others are only open then. Traffic volumes also vary with the time of week.

Maps: For a reasonable scale and contours at 250 feet (75m) intervals the *Nat Map 1: 250 000* series is recommended. However these are a little out of date as far as road information goes. (1958) Petrol company maps are often inaccurate and motor club maps don't give enough detail. The maps appearing on these pages read in conjunction with ones mentioned above should suffice.

Above: Hawkesbury River panorama. The lower half of the river to left and right of photograph. Below: Old cathedral. Below right: Sign at Wisemans Ferry.





bend Leets Vale. Bike route can be seen following
al, Central MacDonald (on western side of river).

Penrith-Goulburn

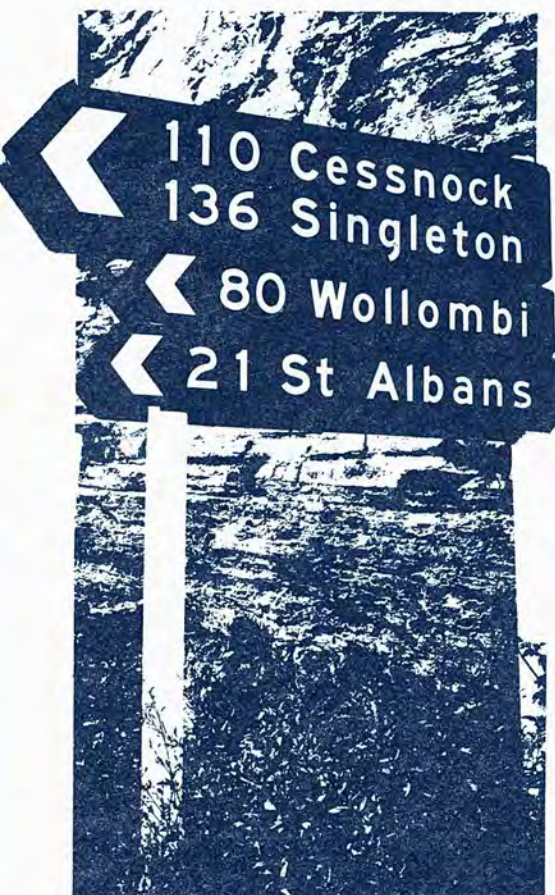
The bike route only touches the outskirts of Sydney. You become aware of its presence and may even catch a distant glimpse from high points but traffic and city riding is not the province of the bicycle tourer, so the contact that Penrith provides will do. If you are finishing or starting your journey along the bike route from Sydney it is recommended that you cover the distance from the outskirts to the centre by train. Regular suburban electric trains run from Penrith to the city daily. This kind of access is especially recommended for riders approaching from the south. A more direct contact with the rail network is made at Campbelltown. Directions from the bike route to Campbelltown are given at the end of this section.

The road between Penrith (at the bike route's intersection with the Great Western Highway) and Wallacia is a good and relatively peaceful bitumen road. From both directions it is a long slow climb up and over Mulgoa hill. Wallacia is situated on the banks of the Nepean River just upstream from its junction with the Warragamba River. The camping area next to the bridge is a fine stopover point.

The Nepean River flows north from the Southern Highlands to join the Hawkesbury. To the east of the river is the undulating Cumberland Plain while to the west the ridges rise into the Blue Mountains. There is a road which follows the main ridge directly to the west of the river. It is this road which the bike route follows from Wallacia through The Oaks to the Mowbray Park turnoff.

Fine views towards Sydney can be had from along this road, but bear in mind that in 1979 Sydney had the second highest air pollution levels in the world. Good views are only possible after rainy periods have settled the muck.

The ridge road passes through mostly undulating open farm country. In fruit season there will be produce stalls along here. From The Oaks to Wallacia there is a net loss in elevation with a steep section between the Nepean bridge and the Warragamba Dam turnoff. South of The Oaks is the Mowbray Park turnoff. From here it is downhill to Picton to the east and also downhill to Thirlmere to the south. The Razorback Range which the Hume Highway crosses north of Picton is an offshoot of the ridge at this point and from the turnoff there are



good views over the Picton area. Thirlmere is a quiet little town which has a few shops, a pub and a railway museum. One could easily spend some time here climbing over the old steam trains and exploring the tightly-packed antique rolling stock closely resembling some present day mail trains in service with the NSW Railways. The railway is today struggling to preserve its identity in spite of its frequent name changes. The NSW Rail Museum is a good reference point but it is only open on weekends for mainly motorised tourists.

From Thirlmere it is a short distance to the Thirlmere Lakes National Park turnoff. There are two roads into the

lakes. Both roads link up and both pass the two largest lakes. One lake is used by waterskiers while the other is reserved for swimming and canoeing activities. At night both lakes are quiet. The area is a peaceful stopover point before climbing up onto the Southern Tablelands. The water in the lake is wonderful on the skin after a hot and sweaty day at the pedals. Nearby is the remains of an old pump-house which used to pump water from the lake up to tanks near the railway line. This was during the last century when steam trains would take on water there before the steep climb up to the aptly named village of Hill Top. All that remains of the old stone building

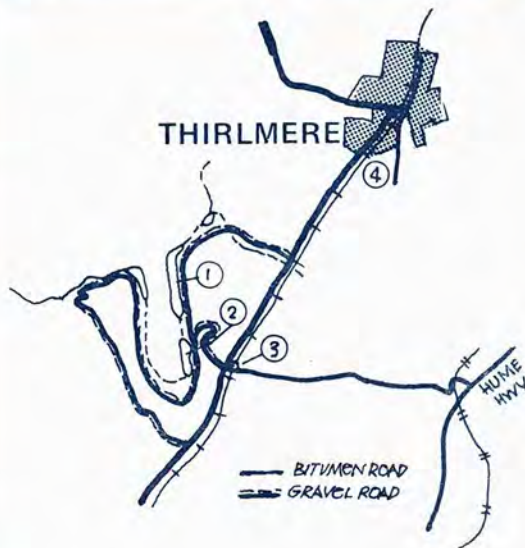
now is a vandalised shell.

From the lakes to Hill Top is a slow climb with a few steep pinches. Travellers using this road from south to north will get their first good views of the plain ahead. Between Balmoral and Hill Top the road passes over the railway line. Pause a while here and think about the effort and tragedy involved in digging this cutting by hand as it was done by convict gangs last century.

There are shops at Hill Top but you will have to pass over to the other side (W) of the railway line. The single-track line between Picton and Mittagong is no longer used by mainline trains so a dual track diversion built early this century



Thirlmere Lakes NATIONAL PARK



Legend:

1. Large lake used by waterskiers.
2. Smaller lake. Swimming and canoeing only. Old pump house adjacent.
3. Old Couridjah railway station. Abandoned station shelter would be a suitable wet weather refuge.
4. Thirlmere railway museum.

Scale of this map is 1:100 000
1 centimetre = 1 kilometre

NB. It is a steep climb up road from lake to station.



The Southern Highlands: Left: Rocky stretch of road over Mittagong Range. Above: Descending the range heading south. Bowral, central distance. Below: Moss Vale.



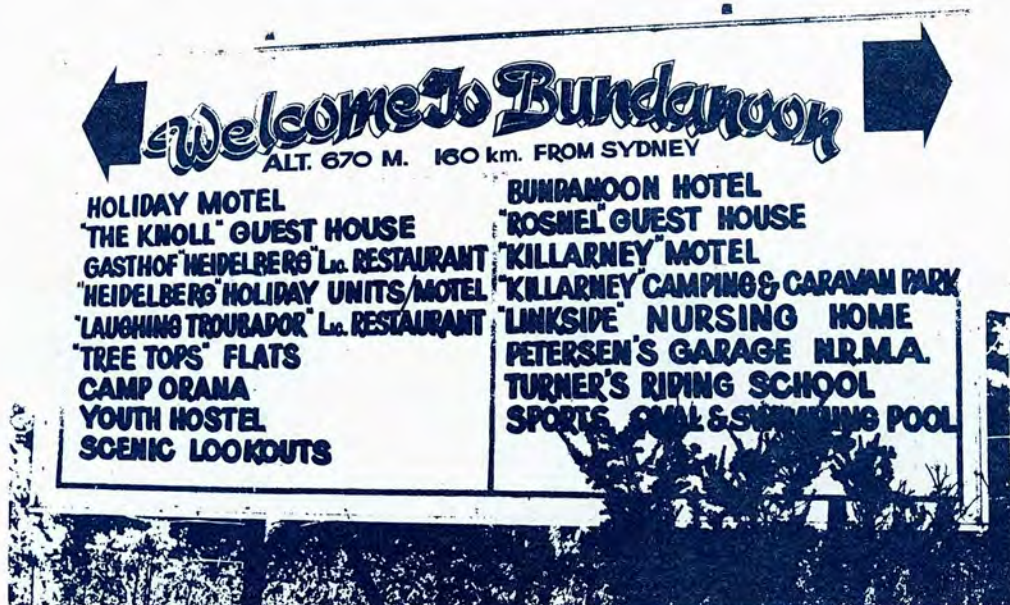
by-passed the steeper Hill Top route. From Hill Top the road drops over to the Eastern side of the ridge and joins the Hume Highway at Aylmerton. The town of Mittagong is accessible from here via the Hume Highway. This is not recommended as the highway is narrow and congested. To follow the bike route south through Aylmerton turn onto the highway and pass under the pedestrian overbridge. Then take the first street to the left and follow it down to the railway line. There is then a short gravel section which follows the line for 500 metres south before joining a bitumen road at an overbridge. Follow this road over the line and down to another intersection and turn right. Travelling in the opposite direction

is a simple transposition of these directions. From the last-mentioned intersection, the bike route follows the old south road up over the Mittagong Range, passing to the east of Mittagong, Mt Gibraltar and Bowral. Wonderful views are possible from many points along this road. There is a short but very rough gravel section between the road intersection SE of Mittagong (The Range Road) and the road junction at the bottom of the range to the east of Bowral. The climb up the range from the south is on this section and is very steep and rough. The northern side, though steep, is a good bitumen surface. For travellers wishing to take in the towns of Mittagong and Bowral, the main road

south from the Hume at Mittagong over the range to the west of Mt Gibraltar is an alternative to the main bike route. This way is sealed but has few vantage points and is heavily trafficked.

The bike route meets the traffic again where it joins the main road mentioned above just north of the Wingecarribee River and Moss Vale. From Moss Vale take the road (turn left before rail bridge travelling south) to Bundanoon via Exeter a fine bitumen road through expensive highlands countryside.

Bundanoon is a beautiful town. Mostly it survives as being a holiday retreat and resort at the edge of the Morton National Park wilderness. It has a good YHA Hostel, a camping/caravan park,



Bundanoon: Below: The bike shop.

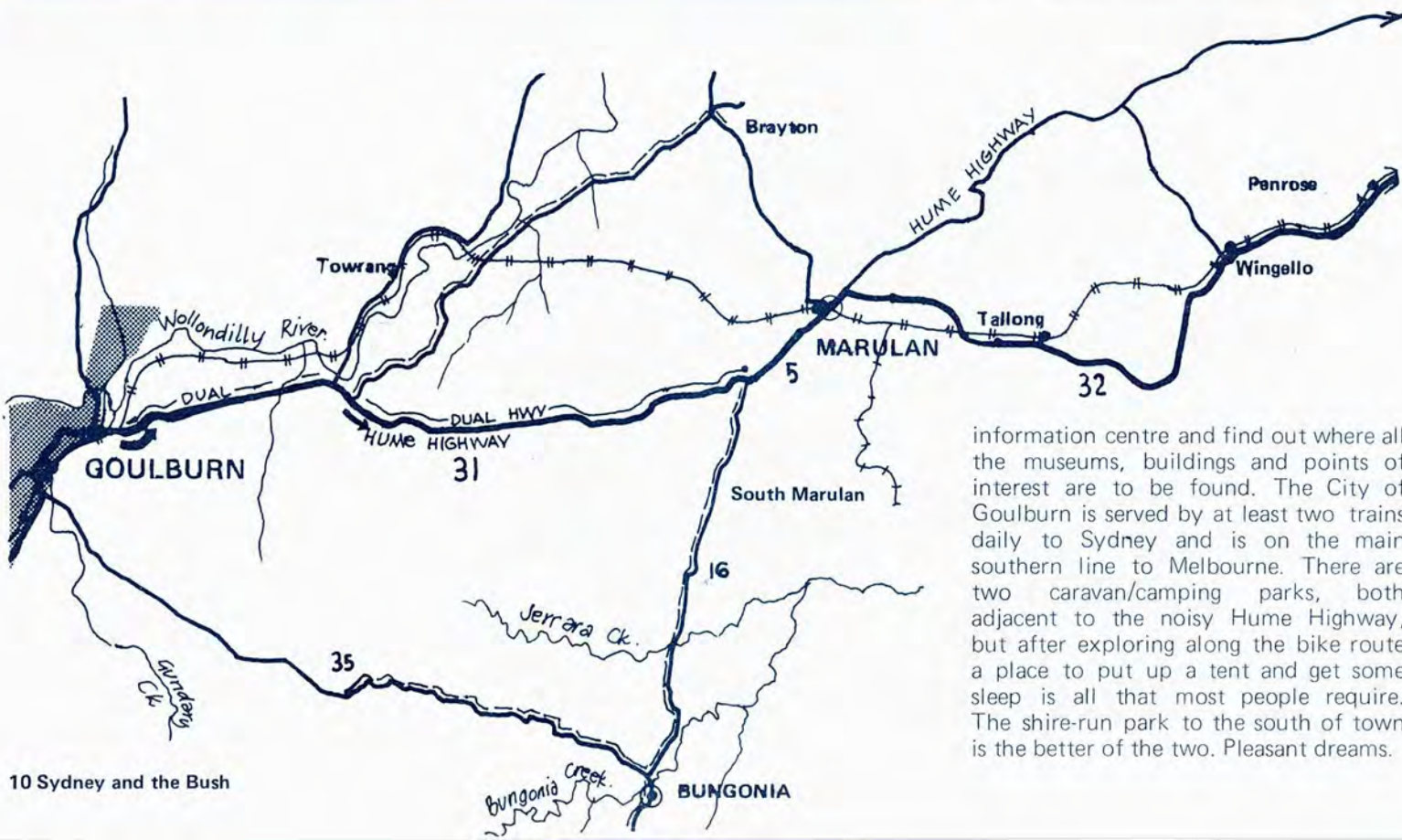


and down the hill from the post office the lovely camping grounds of the National Park. It is handy to know for winter months that there are coin-in-the-slot hot showers here. . . mmm-mmm. Bundanoon is also the place to find one of the nicest country bike shops in the entire bike route. Called Ye Olde Bicycle Shoppe, it's located next to the post office and does a brisk hire business with holiday-makers wishing to explore the park's road system. Call in and have a chat, they are very friendly.

From Bundanoon on to Marulan the countryside begins to change from moist tablelands to drier high plains landscape. The good sealed road from Exeter to Marulan via Bundanoon follows the main south railway line most of the way. There are fruit stalls all along here too.

The route from Marulan to Goulburn unfortunately follows the Hume Highway. For most of this distance it is wide and in parts a divided carriageway. However the section from Marulan to the Bungonia turnoff is not. Extreme caution is necessary for anyone using the Hume. A quieter but longer alternative is the road down to Bungonia and then to Goulburn. This route is mostly gravel except for the final 10 or so kilometres into Goulburn. Another alternative is the road out to Brayton from Marulan. From the Brayton intersection to the highway near Towrang Stockade is all gravel with some rough parts. Only recommended if you are feeling energetic.

Goulburn is a grand old place. Lots of old buildings and a beautiful central park and adjacent court house. Visit the



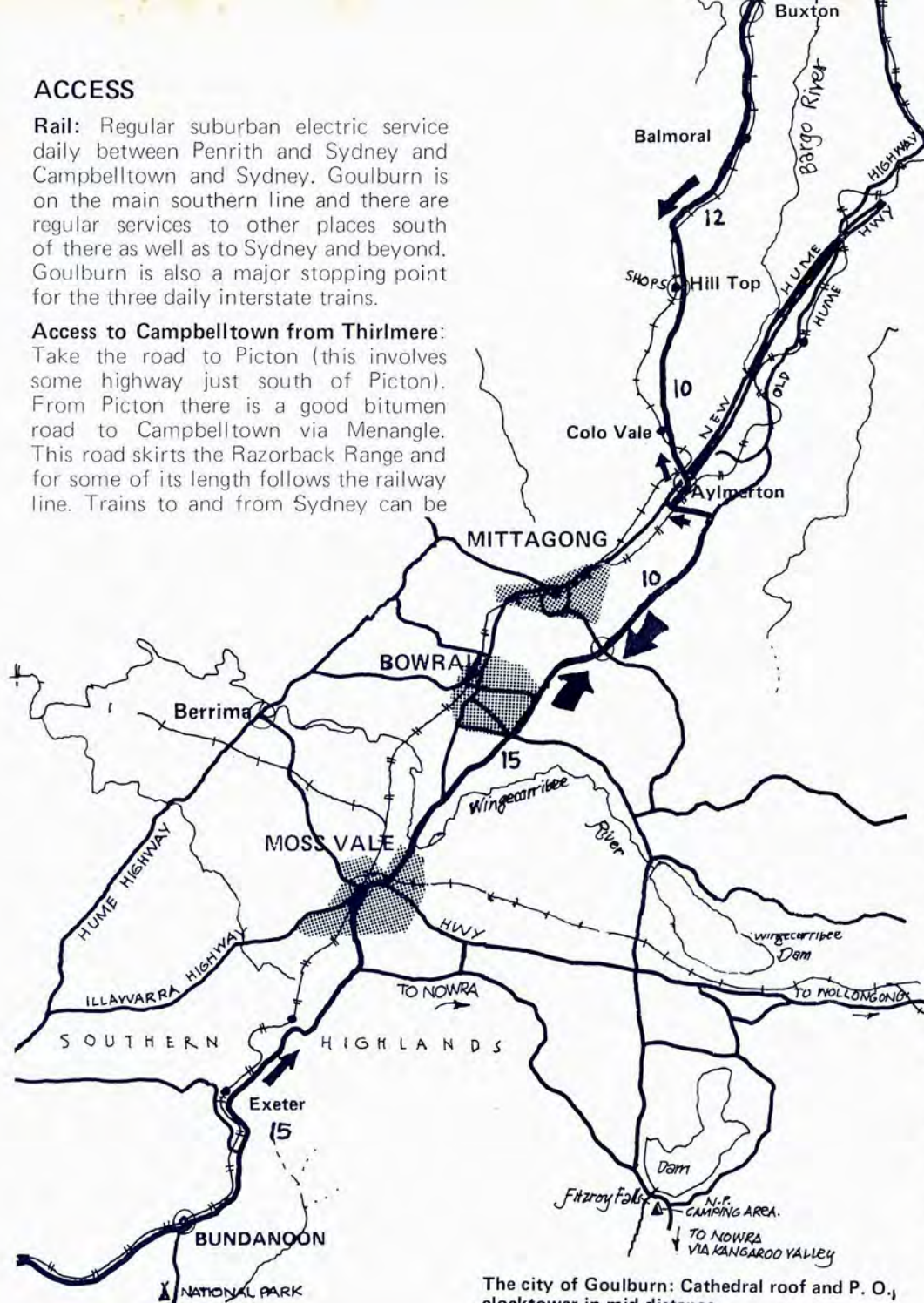
information centre and find out where all the museums, buildings and points of interest are to be found. The City of Goulburn is served by at least two trains daily to Sydney and is on the main southern line to Melbourne. There are two caravan/camping parks, both adjacent to the noisy Hume Highway, but after exploring along the bike route a place to put up a tent and get some sleep is all that most people require. The shire-run park to the south of town is the better of the two. Pleasant dreams.

ACCESS

Rail: Regular suburban electric service daily between Penrith and Sydney and Campbelltown and Sydney. Goulburn is on the main southern line and there are regular services to other places south of there as well as to Sydney and beyond. Goulburn is also a major stopping point for the three daily interstate trains.

Access to Campbelltown from Thirlmere:

Take the road to Picton (this involves some highway just south of Picton). From Picton there is a good bitumen road to Campbelltown via Menangle. This road skirts the Razorback Range and for some of its length follows the railway line. Trains to and from Sydney can be



The city of Goulburn: Cathedral roof and P. O. clocktower in mid-distance.

caught at Picton but the service is not as good as from Campbelltown.

Camping: WALLACIA: Blaxland camping ground. PICTON: Victoria Park, a shire-operated caravan and camping park. THIRLMERE LAKES NATIONAL PARK: Picnic area beside swimming and canoeing lake — overnight only. MITTAGONG: Caravan park on Hume Highway on north side of town — lots and lots of highway and railway noise. BOWRAL: Centennial Park Avenue. Quiet park adjacent to golf links. Turnoff under railway on north side of town. Shire-operated, undeveloped. MOSS VALE: Moss Vale Caravan Park, Argyle St. Southdowns Caravan Lodge on Illawarra Highway out of town on road to Robertson. BUNDANOON: Morton National Park, excellent camping ground, quiet beautiful bush surroundings. Caravan park in town. GOULBURN: Willows Caravan Park north of town on highway. Council park south of town also on the highway. Both very noisy. OTHERS YOU'VE FOUND:

Supplies: Penrith, Maitland, Bowral, Moss Vale and Goulburn have supermarkets and department stores and all facilities. Good supply stores can be found in Wallacia, The Oaks, Thirlmere, Hill Top Bundanoon, Penrose and Marulan. Some of these stores may be closed on weekends. Fruit stalls can be found on the Wallacia to The Oaks road and also in parts of the Southern Highlands.

Cafes and eateries: Penrith, Mittagong, Bowral, Moss Vale, Goulburn.

Bike parts and supplies: PENRITH: two shops. BUNDANOON: excellent bike shop next to P.O. BOWRAL: shop in Bong Bong Street. GOULBURN: two shops, one in Auburn Street and one in Beaumont Street. There are sports stores (limited parts) in Mittagong and Moss Vale. There also is a bike shop in Campbelltown. Refer *Freewheeling Australia* 1/78 for complete NSW list.

INFO: There are good tourist information centres at Penrith, Mittagong, Bowral, Moss Vale and Goulburn. The bike shop in Bundanoon is good for info also.

Habits and Customs: See previous section.

Maps: The information on maps given in the previous section should also be applied to this section with the following additional information. The 1:100 000 series *Natmap* maps Wollongong, Moss Vale and Goulburn are useful accompaniments. The author's favourite road maps are the Shell, Sydney and Environs and the Gregory's State road map No 20 of New South Wales. (This map has a good Sydney and environs map on the back.)



"Heading up north on the east coast bike route, ten days on the road so far . . . tomorrow we'll be in south-east Queensland, Brisbane the day after . . . maybe . . . Mt Lindesay is up ahead of us snagging the cloud . . . the weather is clearing and the sun is getting warmer, though we'll be needing warm clothes tonight still . . . We're carrying a lot of gear but every bit of it gets used . . . those panniers are great!"

karrimor

carrying the load



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Trikes for Health

By Marie Dowling*

Vern Watson is 84, and a well-known farmer and horse-breeder around Nyah West in the Victorian Mallee, where he's lived all his life. Even better known since he took up riding a tricycle; as Vern says: "There's more interest than if I was driving around in a Rolls Royce."

Vern bought his trike nearly a year ago now, and often rides it several times a day. A wheat farmer at nearby Yarraby for over 60 years (his father, Samuel Pearson Watson, selected land 7 miles west of Nyah on the Murray in 1894) Vern and his wife Alma retired to Nyah West some 20 years ago, though he still works regularly out at the farm, now run by his younger son Ian. In recent years Vern has experienced periods of ill-health, and has had a major operation for removal of one kidney. He lost an eye some years ago in a farm accident.

Vern first saw a modern tricycle on TV, and knew straight away that here was the answer: a handy means of transport which could be used to carry parcels as well. While he still has a horse and gig available, harnessing up to drive to the bakery around in the main street would be a long job for a short trip. Since he gave up driving several years ago, Vern has walked to get the mail and other daily messages. Not only does he now enjoy his frequent tricycle trips around the district, with no problems of carrying shopping — he finds he is much improved in health. The regular exercise has benefited circulation, and strength-



ened his legs and feet. He can also travel longer distances than would be possible on foot. Butch, a Queensland blue heeler, usually accompanies Vern on his daily rides (see picture).

Modern well-designed tricycles offer not only a healthy and safe means of transport, but independence of movement as well. There is surely great potential for increased use of tricycles by older people who do not care to drive a car, and by frail and handicapped people of all ages. They would be a popular purchase for use by elderly people's clubs, homes and units. Here is a lightweight, stable means of getting around, which is very easy to "push"; little effort is required to ride one of these well-designed tricycles. Further, it removes dependence on other people with cars, or on public transport, and restores a vital measure of self-control to daily comings and goings.

Vern's machine is a Super Elliott, with 20 inch wheels (28 inch wheels are also available) and was built by Elliott Brothers, cycle makers, of Adelaide. Most tricycles cost about the same as a good 10-speed bicycle.

Vern's tricycle was supplied by Leisure Bikes, of Hawthorn, Vic. Great interest was aroused among regular customers when the trike went on display for a few days at their Burwood Road showrooms. Intending purchasers should check availability carefully. Perhaps manufacturers need to be more alert to the undoubted existing market potential of the modern tricycle.

*Marie Dowling is the assistant editor of *Australian Library News*.

MORE TRIKES

Dear Freewheeling,
I am enclosing a photo of myself on my trike which I rebuilt from a Hong Kong made single-speed and unmanageable machine to what you see in the photo. I have had it for 19 months and am riding it and loving it more and more. It can carry 50 - 60kg with ease. It has a 10 speed derailleur set with ratios of 25 up to 85 so hills are fun. It has a simple lever linkage steering system between the front wheels with camber and toe-in. The bigger the load the faster you go, the better it handles.

Pedalling for peace
David Rodgers, Alstonville, NSW.



Cycling conditions in Canberra

by Malcolm Crompton

The structure of the bureaucracy in Canberra is quite different from the structure anywhere else in Australia. This difference has had a significant effect on the way the interests of bicyclists in Canberra have been catered for, and so before looking at conditions for cycling in Canberra we need to understand the way Canberra is run and governed.

Canberra is ruled directly by the Federal Government through the Minister for the Capital Territory, who is responsible for both the National Capital Development Commission (NCDC) and the Department of the Capital Territory (DCT). The minister has almost complete power in the administration of the ACT.

The NCDC is the authority which plans and builds Canberra. In carrying out this task, it has obtained in recent years at least token, informal, community (through community groups) discussion of its proposals. In obtaining a response from the community, its task is often very difficult because it sometimes gets little response to proposals when they are advertised. However, when the proposal is actually implemented, public reaction can be strong, by which time it can be too late. The NCDC has

no formal responsibility to the people of Canberra.

The DCT maintains and operates services in the ACT, but also tries to be involved with the planning and construction process on the grounds that it has significant impact on the serviceability of facilities provided. It is also responsible for much of the law-making for the ACT and again has no formal responsibility to the people of Canberra.

There is also an elected Legislative Assembly for the ACT, but its function is entirely advisory. The Minister for the Capital Territory in the past has largely ignored this advice when major decisions are to be made.

Its chief importance to the minister appears to be as a burying ground for difficult problems. Such problems are referred to the assembly in the hope that

they will not surface again for some time. Even when the assembly has considered such problems and prepared advice for the minister, there is no guarantee that he will follow it.

A referendum held late in 1978 on various options for the future of self-government for Canberra resulted in a strong vote to continue the present arrangements. This is likely to reduce the impact of the Legislative Assembly or similar future body.

Direct action by Canberra's residents in the running of Canberra (through petitions, lobbying, organised community groups such as Pedal Power ACT Inc or concerted media campaigns) have a more important place in the administration of Canberra than elsewhere for two reasons:

Firstly as outlined earlier, there is no elected self-government in the ACT, and



secondly so many of the people in Canberra are public servants. As such they understand the ways of the bureaucracy, can often manipulate it, and the target, whether the NCDC or the DCT, is a bureaucracy similar to the one in which they work.

However, such activity does not replace the need for directly responsible government for Canberra.

Provision for cyclists' interests in Canberra

Pedal Power ACT Inc was formed in January 1975 to forward the interests of cyclists in Canberra. With many of its members public servants, it has been able to establish contact with the middle levels of the NCDC and the DCT in its campaigns, and make some direct gains in that way. Success, however, has been limited.

In practice it has become clear that the NCDC hardly considers the bicycle to have any role in urban transport, and then only in terms of separating cyclists from the rest of the traffic mix. The DCT, it seems would prefer it if cycling did not exist.

In this light, we can briefly look at the way aspects of cycling in Canberra have been taken into account or ignored.

Bicycle paths

Much of Canberra has been constructed only very recently, and in the process, the NCDC has often provided "multi-purpose trails" suitable for local cycle trips. The footpaths there frequently run behind houses, are not crossed by entrance driveways and so are often suitable also for local cycle trips.

Many of the established areas of Canberra have transport corridors or "green belts" where cycle paths can be built, and only the oldest parts of Canberra resemble other large cities in Australia where there would be little place for bicycle paths.

Between the component towns of Canberra (Belconnen, Woden, Tuggeranong and Canberra Central) are ample transport corridors where cycle paths can also be built. Indeed, Pedal Power considers these routes to be the ones which are in most urgent need of suitable paths because the motor traffic on them is fast-moving and very dense at peak hour.

Canberra, then, is potentially more suited to an adequate bicycle path network than the other cities of Australia, and Pedal Power has placed more importance on the need for them than have, perhaps, similar bicycle organisations elsewhere.

Left: Lake Ginninderra cycle path – view of lake, bridge, Canberra College of Advanced Education and Cameron Offices from the cycle path.



Above: Telopea Park cycle path – barrier across path at an intersection with a road, and typical of barriers in common use. They distract cyclists attention when it is needed most to see oncoming traffic and they deter cyclists from the paths because of the delays they cause.

Below: Cycle path through Lyneham – another type of barrier used to block cyclists at an intersection with a road, again introducing danger by distracting cyclists at a crucial time. This particular barrier does not serve its desired purpose, as four sidetracks have been worn by cyclists avoiding them – see cyclists in background.





Above: Bicycle racks, Civic Centre — well designed racks which hold the cycle by the frame.

Below: Belconnen cycle path — example of rumble strip used to warn cyclists of imminent intersection without distracting attention. It works fairly well.



The NCDC in building second-rate paths for Canberra has unfortunately failed to learn from similar situations in other countries. Over the last 10 years where paths of a similar standard were constructed in the US, the long-term reaction of cyclists was disillusionment and a tendency to continue using the roads. In designing and building these paths, the bicycle users have to be adequately catered for. They see roads as an alternative to paths where they are provided, and if the roads are of sufficiently higher standard the bicycle paths are of no interest to them.

The NCDC, then, has not accepted the basic premises that cyclists are looking for the safest and most efficient routes available, claiming that cyclists will go well out of their way to avoid a road and use a cycle path. The NCDC has involved Pedal Power in the planning of many of the bicycle paths in Canberra, and Pedal Power has been able to obtain improvements to the plans in many cases, but the paths continue to be very pleasant, slow recreational routes.

Pedal Power, therefore prepared a submission to the Minister for the Capital Territory, Mr Ellicott, on this topic and discussed it with him early in 1978. Very briefly we highlighted the following points:

1. A recreational cyclist can ride on a bicycle path suitable for commuting, but not many commuters will use a path built to recreational standards.

2. Scarce funds are being wasted on current bicycle path construction program. We suggested that more funds should be made available if the present program was to be continued, or a reduced program should be undertaken with the present level of funds. In either case, it would then be possible to construct bicycle paths of an adequate standard.

3. Deficiencies in the bicycle paths already constructed fall into three main categories. They were design, construction or maintenance problems. Design deficiencies included inadequate design speed for curves, sight lines etc.; too many at-grade intersections where the cycle path always lost right of way; inadequate path width; choice of circuitous routes.

During construction, further deterioration in standards occurred, where curves became sharper than those planned; drainage patterns were ignored; sub-course preparation was ignored; clearance around the path was inadequate and restoration of the environment was inadequate, leading to erosion etc. which increased the rate of deterioration of the path.

Maintenance of the bicycle paths is a DCT function, and it has ignored this responsibility to date.

The Minister's response centred around the following comment he made in a letter dated 15 June 1978 that 'Pedal Power Inc has to accept the situation which is a compromise between the competing demands for facilities for recreational cycling and the more expensive facilities for commuting cycling.'

Roads

It is not possible to duplicate the road system with bicycle paths, and there will always be significant numbers of bicyclists using the roads. As occurs in any city, lane widths are inadequate at times to allow a car to pass a bicycle while staying in the same lane; road shoulders are usually the most poorly maintained part of the road and traffic light sensors do not always respond to a bicycle.

Both the NCDC and DCT are responsible for these particular problems and they have taken little action to date.

Law

There is no definition in the ACT road laws which defines a bicyclist adequately and thus renders some of the laws relating to bicycle riders and pedestrians more than a little unclear.

The laws governing bicycle and foot-path use are also unclear and indeed there may not be any which govern cyclist and pedestrian behaviour while using them.

A legally safe bicycle has a bell, brakes and, at night, lights and a reflector. There is no standard defined for any of these pieces of equipment, let alone any requirements regarding frame strength or standards for any other components.

The law regarding bicycle parking is so old it only covers suburbs that existed 40 years ago!

There is also little enforcement of the laws affecting bicycle use.

Needless to say, there is little prospect for adequate law reform in these and other areas, let alone a serious consideration of a 40 km/h residential street speed limit such as on the one introduced in Geelong; or other forward-looking reforms.

Other Problems

There is little safety education in the ACT with regard to cycling; no serious official encouragement of cycling (c.f. Geelong report); and little effort in providing for or promoting mixed mode bicycle/public transport travel.

We also covered all these aspects, as well as comments on the roads and ACT law, in our submission to the Minister, but so far he has chosen to ignore them all.



Belconnen cycle path — a view of an attractive, straight run.

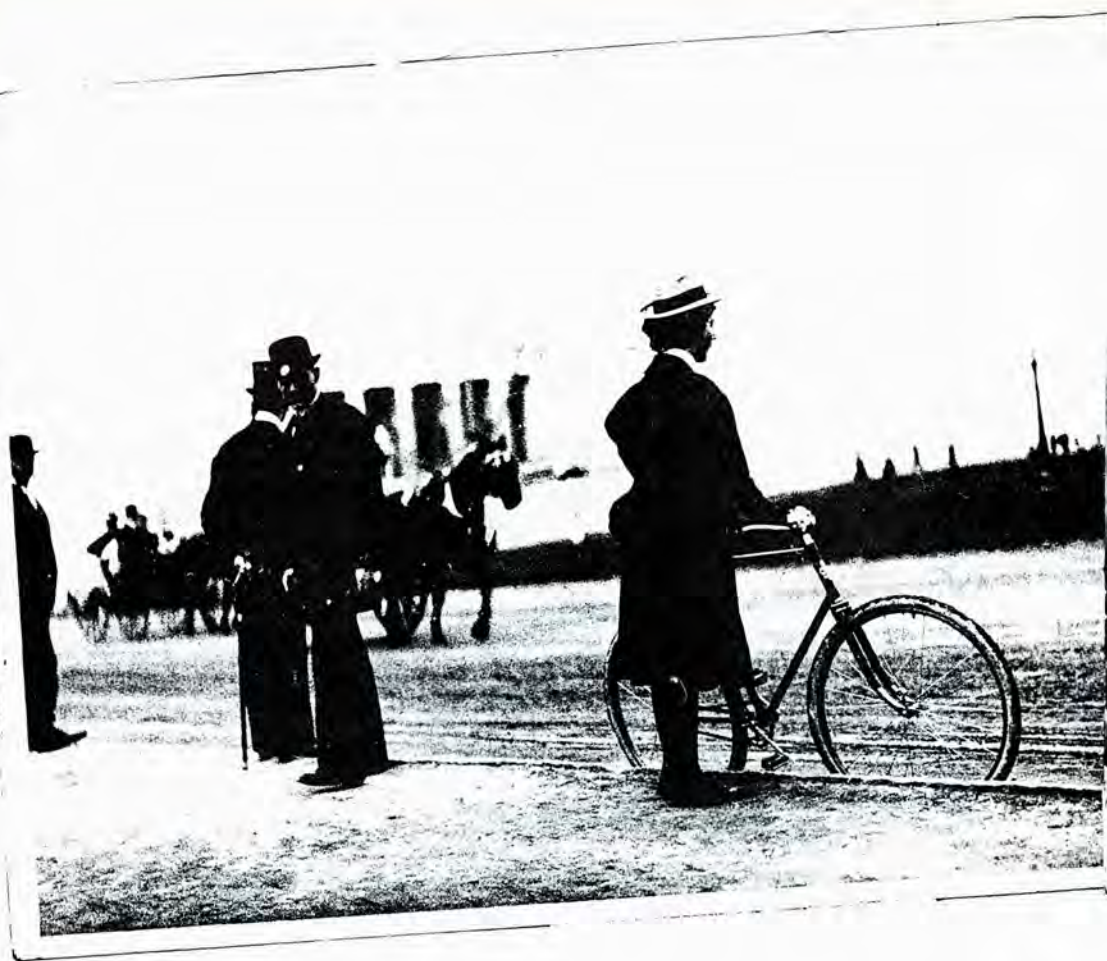
Conclusion

In summary, then, the bureaucracy in Canberra is split between two bodies, the NCDC and the DCT, and there is no governing body responsible to the people of Canberra. As a result, the interests of cyclists in Canberra have not been met in a balanced way, and moreover there is only limited scope for bringing pressure to bear in order to improve the matter.

The NCDC on the one hand has provided bicycle paths and given them some publicity, yet despite some gains by Pedal Power in improving the standard of these paths, they are still not good enough for safe efficient cycling. Road cycling has so far not received any attention at all.

The DCT, on the other hand, has not seen fit to reform some embarrassingly archaic and inconsistent laws affecting cycle use, and it has organised almost no safety education of either motorists (into giving consideration to cyclists on the road) or of cycle riders. There is inadequate enforcement of these laws, with attention being given to more 'serious' problems.

It is quite obvious that neither the NCDC nor the DCT has learned from the experience in the USA or from Geelong-type studies. The result is the construction of second-rate bicycle paths and a disregard for any other aspect of cycling needs.



Custom and nature

Victoria Road is not one of my favourite places at peak hour, especially when I wend my way along it on a naked bicycle. I'm all too conscious of the 7000 tonne truck raging away behind me like some implacable wild bull — snorting and roaring in derision and anger at the sight of a young woman and the flimsy contraption beneath her.

I pedal furiously and arrive at my destination red-faced and filthy, but somehow ridiculously pleased that I have proven the simple beauty of the bicycle again. The bus I would otherwise have caught is some 30 minutes behind me.

It seems unbelievable that 100 years ago a woman on a bicycle was a very rare and maligned creature. Having attempted to mount a penny farthing (I didn't even get to the 'ride' stage) I have nothing but the greatest admiration for the first women cyclists. But what a morally dangerous and despicable bunch they were seen to be — attiring themselves in 'unbecoming and indelicate dress' which raised eyebrows around the world. Hoydens, they were, dashing off on tours

around the countryside without even the courtesy of an accompanying chaperone. One particularly concerned newspaper editorial pointed out the incredible dangers of such immoral jaunts: *Given a lonely road, and a tramp desperate with hunger or naturally vicious, it stands to reason that a girl, or indeed a woman, must be in considerable peril.*

Despite such dreadful dangers' however, it seems that bicycles had strong attractions to women, and indeed a whole generation of single American women were threatened by its rapacious popularity. The American Women's Rescue League attempted to grapple with the problem by exhorting all bachelors to marry. Without the edifying influence of marriage, too many women would begin to ride bicycles and would *swell the ranks of reckless females who finally drift into the standing army of outcast women in the USA.*

Outcasts, that's what they were, actually thinking to replace murderous whalebone corsets and grandpas' baggy breeches or daring colourful bloomers —

causing respectable women to swoon in horror.

One inventor attempted to make bicycles more acceptable to these respectable women by designing a shield to fit around the outside of voluminous skirts. Not too sure of the success of his endeavour however, he counselled women to wear high button up boots *just in case* a suggestive ankle should accidentally be revealed.

Many men hated the very idea of women mounting bicycles whether in dresses or breeches. In 1870 an apologist for this 'male only' line, put it this way: *It would no doubt be mighty pleasant to go cycling with your fair friends, each mounted on his or her own bicycle, but custom and nature revolt against it . . . at least half of the interest of one sex in the other arises from their respective dependent and protective positions. When a woman cycles, she destroys all this kind of subtle interest and thereby loosens one of the sweetest and firmest bonds in existence.*



revolt against it..

by
Sally
Matthews

But as time went on and women seemed determined to exhibit themselves in this shameless way other men could not but help by impressed by the 'skill and daring' which many women developed. In 1897 an article described Lady Cairns exploits: *She was a very plucky rider and one hears of her in the neighbourhood of Windsor flying downhill with 2 or 3 companions as daring as herself all hand-in-hand — and not one of them even attempting to guide their machines, but trusting entirely to balance . . . Miss Muriel Wilson, who is another smart cyclist, has been seen again and again in Hull . . . with one hand thrust in her coat pocket and the other engaged in holding up her parasol.*

Even the Rev Carlos Martin had to admit in 1892 that *it would be just as sweet and just as pleasant to make love to a woman wearing bloomers as to one who does not.* (I think I know what you mean Reverend!)

The new cycling woman was rapidly becoming a social force to be wondered at in Europe and America. The *Minnea-*

polis Tribune admitted this in 1894: *cycling is fast bringing about change of feeling regarding women and their capabilities. A woman on wheels is an independent creature, free to go whither she will. This, before the advent of the bicycle, was denied her.*

Another writer explained it like this: *Until the 1890s women confined their demands to the right to vote and timid advocacy of dress reform. But on the bicycle the American woman was another being, free and her own mistress. She wore the kind of clothes she wanted, men's opinions notwithstanding, and she began to reach for even more freedom.*

In Australia however, things were a little slower and it was a man in 1890 who took it upon himself the wonders of cycling for women. He decreed the bad image that women in grandpas breeches had caused and discussed how this sight *did much to disgust the people who, through ignorance of the subject, could not possibly dissociate baggy breeches from bicycles.* He proceeded to present certain *crushing facts* for timid women

to consider: *in England the cycle is ridden by the wives of gentlemen, of knights, of barons, of earls, of marquises, of dukes, of princes and of kings. In short it is daily used by the educated and clever women and by the upper classes of English society. To enumerate their names would entail reading through 'Debrett's Peerage'. It should be enough for you to recollect that the public behaviour of the leading moral English-women cannot be deemed unladylike.*

Apparently his appeal was successful because in no time at all women were on bicycles in both Sydney and Melbourne — quite the trendy thing. And so are women on bicycles today. Perhaps we don't exhibit quite the same finesse and style as our foremothers, but we do have the same courage and strength. Theirs was the strength of going against society. Ours of riding along main highways in peak-hour traffic. Perhaps not quite so courageous! I'll have to practice zapping down Victoria Road holding an umbrella aloft with one hand and eating a banana with the other.



Some Guide Lines for Cycling Survival

or why Victoria is the Car-Din State

by John Friedman

The bicycle in the last few years has increased in popularity nearly fivefold in Victoria. Opposing this, the awareness of the motorist towards the cyclist has not increased but rather decreased, due to the selfish nature of a large number of motorists while inside their respective vehicles, and also because of the heightening obsession of motorists with **speed** and **time** which has developed with the increasing pace and demands placed on the dwellers living in the urban and suburban areas. This article is intended as a **basic** survival and thought stimulation guide for the cyclist. Until the governments (both state and federal) bring in an education program which deals jointly with cyclists and motorists, then cyclists will be forced to adopt the tactics of the urban guerilla so that one's existence is in less danger of being destroyed by the mechanical beast on the roads. The following remedial steps are for use by both the experienced and inexperienced cyclist with the eventual hope that cyclists receive a fairer deal on the roads.

A — Considering that one of our most precious personal assets is our head/s, it is about time that something was done concerning the cost of protective headwear. At present the only truly satisfactory helmet available is priced between \$54-59, this being out of the price range of a majority of cyclists and in many cases greater than the cost of the bicycle used. When so much is said about the number of road deaths and accident victims and the costs of keeping patients in hospitals is rising steeply for the government, subsidisation of the cost of helmets should be undertaken so that the incidence of head injury is greatly decreased.

B — As many European and American countries reduce the amounts of lead present in petrol, certain Victorian politicians have asked that the lead amounts in our petrol be raised substantially. Lead is one of the severest chemical hazards faced by cyclists due to its cumulative uptake in the body. Because of the strength of the petrol and automobile lobbies in Australia, the cyclist is forced to suffocate behind motorised vehicles belching out lead and dangerous hydrocarbons. Lead as it accumulates in the body affects the brain and other organs causing insanity and severe organic breakdown in the body due to the lead saturation of tissues, especially in the lungs, spleen and liver. Politicians should be made aware of our plight by our continual requests for the lowering of the lead levels in petrol, and if nothing is done, we should organise mass rallies to publicise the harmful effects that we are faced with day by day.

C — The motorist, being isolated from the world outside the motor car, tends to disregard all other forms of transport on the road. Cyclists are severely affected because of this due to their lack of protection. The cyclist is subjected to the abuse and lewd comments of a large proportion of motorists.

To combat this the cyclist has a number of directives which can be employed, some of these being:

- 1 Belittling the motorist so that other, more courteous motorists are aware of the bad habits of certain drivers.
- 2 Using the bicycle pump or other sharp objects to scratch the offending vehicle.
- 3 Delivering to the offending vehicle a solid thump with a bicycle lock or any other piece of solid hardware. If I know that someone is purposely trying

to threaten my existence on the road I will endeavour to break one of the car windows so as to show the motorist that s/he cannot get away with trying to kill me. Remember a cyclist can always retreat to the footpath and travel in the opposite direction.

- 4 The car registration, model and colour can be reported to the police, and then insistence be placed on the police officer that the matter be brought up before court. This is especially effective when a witness is present to lend support to your claims of harassment on the road. Don't allow police to say that it is too hard to find the driver of the car, as this is not true. If police rode bicycles (which would not be a bad idea), their attitude of ignoring cyclists would change as would the legal rights of cyclists (which seem to be minimal at present).

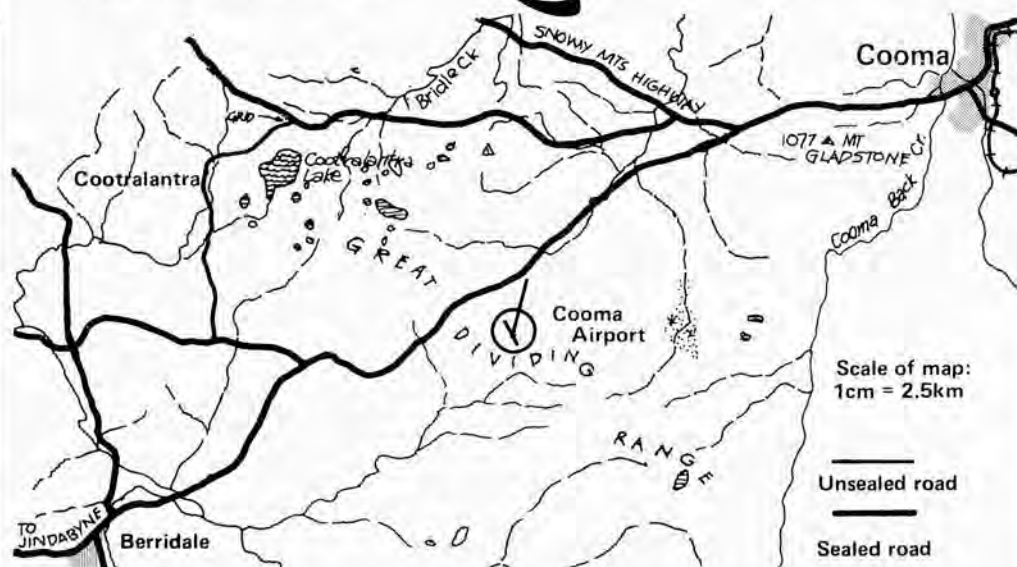
D — One of the greatest injustices to cyclists at the moment is the total disregard of the bicycle as a mode of commuter transport by various planning and traffic authorities in Victoria. This is exemplified by the **banning** of cyclists on the Eastern, South Eastern, Tullamarine and Westgate freeways to name a few. Security parking facilities for bicycles still appear to be a thought of the future. Cycleways should be designed with the needs of the cyclist in mind, not the non-cycling bureaucrats.

Well, fellow cyclists, I hope that there are a few ideas to stimulate your thoughts here. Remember it is very important to obtain feedback and exchange of ideas.

Let's make 1979 the year of the cyclist in Victoria, and perhaps even organise the largest cycling rally to ever arrive at Canberra so that we can lobby for the **rights of cyclists to survive**.

Backroads

An occasional bicycle touring column compiled by Warren Salomon.



CROSSING THE DIVIDE

With a name like 'The Great Dividing Range' you would at least expect the east coast continental divide to be more spectacular. In some parts it rises in an escarpment whereas in other places it is only a low series of hills hardly breaking the relief of the tablelands countryside. When I thought about it and consulted my maps and notes from previous trips I found that in my travels I had criss-crossed the Divide many times not even realizing I had done it. One such place is the road from Cooma to Berridale, NSW. Not ideal bicycle touring road in winter because it is the main access route to the snow country from Sydney and Canberra. The traffic is often heavy and fast. But in summer the Monaro high plains area and the Snowy Mountains area generally is fine touring country. Take your woollens though as it can snow up top even in mid summer.

From Cooma it's a long slow 160m climb up to a low saddle just north of Mt. Gladstone. It is usually at this point that snow-covered mountains of the main range and Kosciusko area come into view. Very impressive and even physically cooling to see that snow especially if you're sweating it out in the heat. The high plains can get very hot and flies are a real problem. A visit to the disposals store in Cooma can get you a nifty little fly net to drape over your hat to keep you from swallowing the little buggers. Auugh!

From the Mt. Gladstone saddle to the Snowy Mountains Highway (to Kiandra)

turnoff, it's an exhilarating downhill. From here there are two routes to Berridale which both cross the divide. One route follows the main bitumen road to Jindabyne and the other a more westerly route. This route has some short steep climbs and some dirt road but virtually no traffic. It is longer but nicer if there is a lot of traffic on the highway. The divide on the main road is crossed just after the Cooma Airport. No great climb, it's even hard to imagine that this creek goes in to the sea thousands of kilometres from that one. Up here it's the undulating Monaro Plains. The main range is just a watershed. The back road follows the Snowy Mountains Highway from the turnoff for approximately 2.2 km. The turnoff to the left is taken and for some distance it is open countryside and good bitumen.

Following a long slow climb there's an exhilarating downhill to Bridle Creek. Past the creek crossing (insignificant creek) the road climbs steeply. At about the top on the left is a cattle grid and the start of a dirt road. Views back towards Cooma can be very good at this point.

The divide at this point rises from the flatness surrounding the land locked lakes of which Lake Cootralantra is the largest. The road crosses the divide as it contours around the slope and drops down to Jeffs Creek and passes unfenced through groupings of farm houses. For about 2km after the turnoff at the bitumen the road passes above the lake. You can get glimpses of it through the ridges and trees.

The 1:100 000 Berridale map shows a road branch at "Cootralantra" but I couldn't find one. It goes straight on over the creek and eventually climbs out of the valley via a low saddle and joins another bitumen road called the Rocky Plains Road. If you turn right at this junction it's a slow climb and a swoop down to another road intersection: The cross junction with the Berridale to Lake Eucumbene road. From here Berridale is eight easy kilometres off to the left (SE). There is a useful sign post at this junction but none at any others so the map mentioned above plus the 1:100 000 Cooma map is a very reassuring accompaniment.

On both roads mentioned the divide is crossed where it is running north south, but the streams on the east of the divide drain off to the Murray and those to the west eventually reach the sea in Eastern Victoria.

There are camping/caravan parks in both Berridale and Cooma.

GUTHEGA — OLSEN'S LOOKOUT

It's a different crossing in the central area of the Snowy Mountains. A road exists up from Guthega Power Station over the Main Range (as the divide is known here) via Schlink Pass.

A good starting point to travel this road from east to west is the Long Island camping area just off the bitumen road from Rennix Gap to the power station. Next to the switching yard behind the power station there is a barrier across the road which begins its climb up to Schlink immediately.

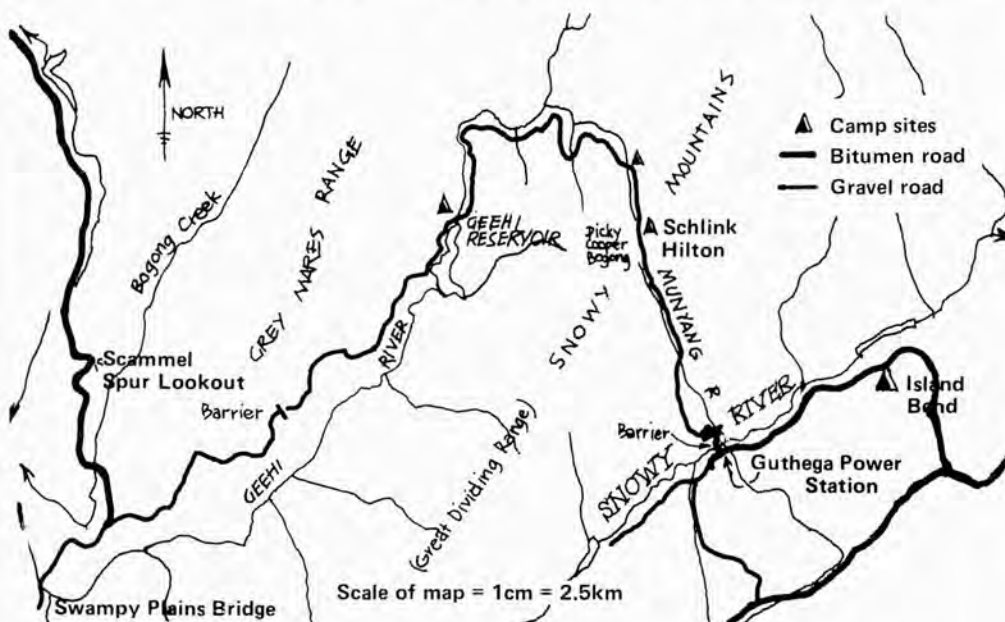
The road is mostly used by Snowy Mountains Council (SMC) maintenance vehicles to service the high tension power lines which bridge the Guthega Power Station and the switching yard at Geehi Dam. So if you keep to the road which follows the power lines you can't get lost. As it is used for access the roads condition is only marginally better than that expected of a fire trail. The eastern side is better formed and maintained than the more remote western portion.

On the way up from Guthega old huts are passed to the left. These are used mostly during the winter by cross-country skiers and their use is discouraged by park authorities in summer. Wilderness bicycle riders are advised to carry tents and not to rely on these huts too much. There is usually a hygiene problem near them as a lot of people using the hut and its environs pollute the fragile alpine environment with excrement and other things. However these huts are worth a try if the weather turns foul, which it can do very quickly at these altitudes.

Schlink Pass lies at roughly 1800 metres which makes the road over it a pretty high bike path. The hut to the west of the pass is called the Schlink



Approaching Schlink Pass from the east. One of the few downhill sections on a mostly uphill road.



Hilton and features 24-hour running water and views of Dicky Cooper Bogong across the valley from the ubiquitous power lines.

The alpine meadows come alive with wildflowers during January and February. These months offer the most stable weather conditions. The road to the west of Schlink Hilton drops down into the remote Geehi valley. Thousands of grey tree trunks make a stark reminder of the huge bushfires that raged in this area during the sixties.

The road in these parts is very very rough and you may have to walk your bicycle down a few parts as large boulders and wash-aways are common. This section would be better as an up route. On both sides of the range however, it is necessary to walk some treacherous sections and even with low gears tyres slip and slide in the loose surface. Camping spots are easier to find on the eastern side in the vicinity of the huts. On the western side the road clings to the hillsides and only road-side camp spots are available. Some space may be found close to the Geehi River crossing above the dam. There is a steep climb out of this crossing in both directions.

The area surrounding the Geehi dam wall is a bit depressing as excavation scars haven't healed yet. Camping here is also limited though there is a disused picnic area (complete with toilets) at the top of the dam wall.

From the dam substation to the road barrier near Olsens look-out the road is in better condition and at least one or two maintenance vehicles will use it per day. From this road, spectacular views can be had of the western escarpment of the main range as it rises out of the Geehi valley.

A good starting point campsite for a east-west traverse of this road would be at the Swampy Plains river crossing. For fit riders in good conditions this road can be traversed quickly in two to three days. More time should be allowed as road and weather conditions will vary the pace of your journey. The nearest food supply places to the starting points (both one day's ride away) are Jindabyne and Khancoban.

You should notify the NP&WS rangers at Khancoban or Sawpit Creek of your journey. Snow can be expected in the Schlink Pass area at any time of year. In the event of failing visibility due to mist, snow or sleet, it is best to take cover and wait for conditions to improve.

An excellent map of the area is the Kosciusko National Park Tourist map which has two maps of the area at scales of 1:100 000 and 1:250 000. It is published by the Central Mapping Authority of NSW. Maps are available from all NSW Lands Department offices or the CMA, Panorama Avenue Bathurst NSW, 2795.

WHAT AN ACHIEVEMENT!

Nicole Harrison

Perth is a super city for bike riding; sunny weather, manageable traffic, beautiful views, reasonable terrain. Even well within the outer city limits, there are cycling venues to please all tastes: rides along the beaches for the sunseekers, along the river for truly splendid vistas, rides to the hills for verdant panoramas and challenging climbs, tours of the Fremantle area for the local history bugs, and of course acres and acres of parkland such as Kings Park and Perry Lakes, great for shorter outings.

The Cycle Touring Association of WA exists to take advantage of these

conditions. Its 'city' rides are always well attended, and after four years of operations, organizers are still finding new, untried routes for more rides in the metropolitan area. Some of the CTA's best city rides are its yearly 'achievement rides', modelled on similar events conducted by United Kingdom cycle clubs. In 1977, two such events were organised: a 50 and a 100 kilometre achievement. Both were very successful, and were run again in 1978, thus securing their status as annual events. The 100 km achievement ride is particularly popular, with its basic route running the entire

length of the Perth ocean front, from the Fremantle harbour entrance lighthouse to Mullaloo — the northernmost beach suburb — and back again.

Sunday, September 10th was the day of the CTA's inaugural 200km achievement ride. And an achievement it certainly was, if nothing else — the weather saw to that! Fourteen intrepid riders assembled at 7am at the City Beach roundabout — undaunted by the wind and the intermittent rain which had been threatening the success of the ride since the previous afternoon. For this day, the weather predictions were indeed bleak:





"200 Km. Achievement Ride"



showers, 'fresh' winds and a maximum of 16 degrees.

From City Beach, the small group travelled north through the beach suburbs, riding by Scarborough's ocean-facing flats, and further along, by the architect-designed houses of North Beach and Sorrento. The wind was blowing in from the north-west, bringing in some ominous-looking clouds, and making the inside rider's position quite uncomfortable. We had hardly travelled 10km when we rode into our first shower. We took shelter for a few minutes before pushing on, our spirits still undampened. However, it was a relief to turn eastwards and be pushed across the dunes to Wanneroo, a market garden area which lies just north of the immediate metropolitan area. Beyond Wanneroo township, the group headed eastwards again into open countryside, across the coastal plain on which most of Perth is built, towards the Swan Valley and Bullsbrook, site of the Pearce RAAF base. Bullsbrook was our first stop and our first very welcome, warming food. The temperature seemed

to be dropping and we were already quite wet, but the rain squalls turned into hail as we headed south towards Midland, and the gusts of wind which buffeted us along the Great Northern Highway made riding more like a duel with the trucks.

The weather from Midland onwards seemed to be improving and as we passed the halfway mark, we were beginning to enjoy the lovely scenery of the foothills area, and the slight tail wind. Little did we know! By the time we emerged onto the Albany Highway, it was pouring again, and again and again the speeding south-bound cars sprayed us with curtains of icy water. The few hills to Armadale loomed ahead like mountains. The shopkeeper in Armadale couldn't quite believe his eyes when twelve saturated and stiff cyclists trudged into his shop; he was even more disbelieving when he discovered the details of our outing.

Armadale is the southern 'boundary' of the metropolitan area, and as we left it, we were pleased to be back on country roads again. However, the now thoroughly chilling rain gave us little respite until our return to the coast at Medina, south of Fremantle. We were soaked through and through, and gears were becoming quite difficult to change,

as riders' fingers became numb from the cold and cramp, but we heartened at the idea of the 40km northern run with a massive tail wind. It was indeed a relief for sore legs, and we travelled in relative comfort, encouraged by the 'beginning of the end'. Even then, how far away Fremantle seemed, as we pedalled through the industrial suburbs of Kwinana and Naval Base. From Fremantle, even the hills to City Beach did not feel so arduous, as we were back in familiar territory, and our minds were filled with thoughts of home, warm baths and a good meal.

The inaugural CTA 200 was certainly held in arduous conditions, but in spite of wind, rain and hail, twelve riders completed the event, in times ranging from 9 to 10 hours, well within the specified 12 hour limit. Riders' ages ranged from 15 to 45, and there was one woman in the group. The ride was remarkably free of mechanical problems (8 punctures, nothing worse), but riders were still grateful for the moral support offered by our 'team' of three back-up drivers, who followed the group in relays throughout the day. All participants in this gruelling event have received club trophies and badges, as a symbol of their achievement.

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Nearing the end of the Gibb River Road. Mt. Range.

Photo: Denis Montalbetti

Two Wheels Across the Top

You will remember in our last issue Denis Montalbetti described his epic ten-month crossing of the Australian continent and in particular the Nullarbor Plains section of the journey.

In this third and last instalment Denis is joined by Paul Denny and they describe perhaps the most difficult section of their travels: their passage through north-western Australia. The cover photo from **Freewheeling 3** was taken in this remote section of Australia. Now read on . . .

We had both been solo cyclists until our linkup at Broome, one of us having pedalled from Noosa Heads, Queensland, and the other from Sydney. After experiencing the dirt track from Port Hedland to Broome, we had both become fully aware that the Perth-Darwin leg was a tough one. Together, we decided to take the Gibb River Road, a rugged track which winds its way through the heart of the Kimberleys from Derby to Kununurra.

In Derby, we were warned by officials of the Royal Doctor Flying Service and of the Main Roads Department that this route was *not conducive to cycle touring*, and that after the Gibb River Station, it became a four-wheel-drive track exclusively. Preparing for the worst, we packed out bikes with 1½ weeks' supply of food — flour, sugar, dried meat, cheese, rice, powdered milk, dried fruit, etc — and set off for Kununurra.

The first week on this road proved to be enjoyable, as we saw a few gorges and uncountable wildlife; moreover, the road conditions were fairly good up to Barnett Station. Here we saw beautiful Manning Gorge and replenished our food supplies from an albeit limited stock. After a couple of days' rest, we set off on the last half of our trek and by evening we were at the Gibb River Station, the last one for the remaining 239 km of dirt road. Here

we enjoyed a change in diet, delicious Kimberley beef kindly donated by Les Russ; this is only one example of the fine hospitality we encountered along the way.

From here onwards the road deteriorated to a two-wheel track which would discourage the average motorist, with its surface of severe corrugations, deep sand, creek washouts, bulldust and long stretches of razor-sharp loose rock. Our frustrations climbed as our average speed dropped to 10 km/h, and we found it physically punishing to pedal every last inch (no freewheeling here!!). Tyre wear and punctures proved to be a major problem: one 40 km stretch produced 6 punctures. This difficulty was finally overcome by lining tyres with other tyre-sleeves to be in fact riding on 4 tyres. Traffic was scarce; the few motorists that did come by stared at us in disbelief. Some were kind enough to offer us refreshments, all gratefully accepted.

After a determined effort, we reached the bitumen again. We had forgotten how smooth 'real roads' were: this one felt like glass to us!

The 13-day, 600 km trip along the Gibb River road was the experience of a lifetime. This rarely travelled region supplies the tourist with splendid views of rolling countryside, unspoilt gorges and jagged peaks. The diversity of flora and fauna is astounding and very obvious to the slowly moving cycle tourist.

Once on the bitumen, we pedalled the remaining 50 km to the Kununurra pub on our somewhat worn machines, looking like war refugees. Never had beer tasted so refreshing! From Kununurra, we continued on to Darwin, thus completing the longest and toughest leg of our journey around Australia.



The end of the dirt (very happy moment). Only 50k left before Kununurra where we celebrated at the pub.
Photo: Denis Montalbetti

Mt Barnett Station and the people who ran it.

Photo: Denis Montalbetti



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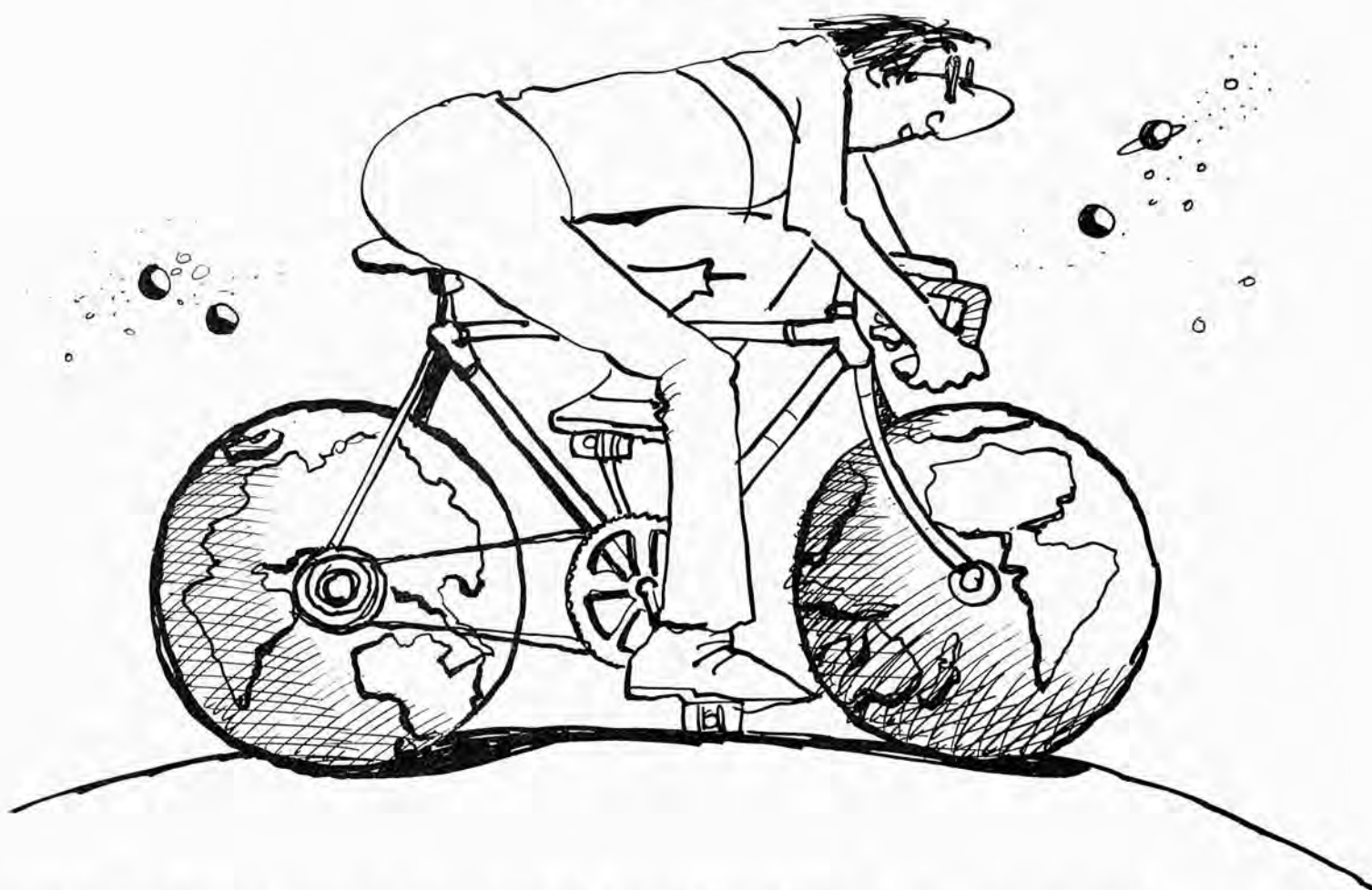
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France and England with a Bicycle

by Duncan Stevenson



I left Sydney last year to meet up with Doug in London with all manner of extravagant ideas for a 'Grand Tour' of Europe by bicycle. After all, it looked such a small place on the map, barely that wide, and not much longer. Now, almost a year later, I regard the 60 mile trip from here (Oxford) to London as quite a long journey.

Buying a Bicycle in England

I'd decided to buy a new bike in London and so spent several days going from shop to shop. Here there is almost the reverse of the Australian set-up: lots of very good frames with medium quality parts. There are several good shops near the centre of London accessible by bus, tube and foot. Examples are Condor Cycles, F.W. Evans, Bell Street Cycles. Anyone wanting to find out more can look in the telephone book, or in a copy of *Cycletouring* - the Cyclists' Touring Club journal. Prices were quite a bit cheaper than in Australia.

I settled for a Falcon *Olympic* with a Reynolds plain gauge frame, alloy components, mudguards and rack for £107 (about \$A180) though six months later I helped a friend buy a bike and we found a Mercian with 531 butted frame, Shimano 600 parts and Brookes B17 saddle for £160. The big disadvantage with a new bike was that the running-in problems occurred on the trip and were a source of annoyance. It came with 52/40 teeth on the front and 14/28 on the rear, but after 3500 km I changed the rear cluster to 14/30 for better hill climbing.

France and Belgium in April

I set off on April Fool's Day by train for Dover to meet Doug again, and we took the channel ferry to Boulogne (about £8 each, bikes free). As the mist and rain of April descended we tried our first experiment with the cheaper French hotels. Overall we found that the one-star or no star hotels would give us a room

with two beds for FF25-35 (\$A5 - 7) a night. They all seemed happy to look after our bikes, often in the corridor or even in the restaurant if there were no spaces outside. When we could we stayed at youth hostels (*Auberges de la Jeunesse*) which ranged from very good to dreadful and cost FF7 - 14 a night each. There are not as many hostels in France as in UK and many open only in summer.

Our route took us north into Belgium through some very dreary flat country to Bruges and Brussels where we visited a mutual friend. Then we headed south through rather empty country into France. One bright spot was a small Belgian village called Falmignon, about 40km south of Nanur, which had a bicycle museum with over 300 ancient bikes. We were his only customers that day, and had a two hour guided tour, and even a sample ride on one.

We reached the French border as light

snow began to fall, and after a quick customs search we carried on into quite hilly country. We reached Verdun looking like cycling snowmen. Many days later we reached Vienne (just south of Lyon) hoping to meet some friends, but they had already left. We now turned north-west and crossed over into the Loire Valley, which we more-or-less followed up to the area where the French royal palaces were. We visited only four of the hundred or so of them. Then up through Brittany, with the weather fining up for a few excellent days' sightseeing before taking the ferry from Cherbourg across to Weymouth in England.

We were using the excellent Michelin 1:1 000 000 road map to find our way about on what is a clever system of roadways.

Each road is classified by letter N or D with the second category being the best for bicycles. All the routes are then numbered N67, D996, etc. and virtually every junction is so signposted. So to go from Balbigny to St Germain-Laval one just looks for the D1 route and follows that route number. An added bonus was the long French lunch break, noon to 2.00 pm, when virtually the whole country stops. Riding at this time on D roads we could quite often go for half an hour at a time without seeing a car.

We ate well on this trip. Fresh and cooked foods from the equivalent of a delicatessen, and French bread sticks and cakes made fine picnics and on wet days the restaurant of a small village hotel had excellent and quite cheap meals. Our own cooking set of gas stove and billies filled in the gaps with hot drinks by the road and often hot meals cooked surreptitiously in our hotel room. The various shop owners were remarkably patient with our attempts at speaking French and a small dictionary gave us key words in menus. English is not spoken at all in many small towns.

Our lot as cyclists on these roads was very good. The corner of Belgium through which we rode had cycle paths next to most main roads. France did not have these, but the traffic was very courteous. Even big trucks would give us a wide berth when passing, and held back behind us if it were not safe to pass.

Our only embarrassment was the 'tunnel' in Lyon — 3km of freeway under the city with no footpath, and with 100km/h traffic — into which we accidentally strayed. It then led to an 'autoroute' (freeway) which we had to follow for 10km to find a suitable exit. A truly terrifying experience. All told we went from sea level back to sea level and covered about 2100km in the month we were there.



European tandem tourists with trailer.

Then England

Riding in England is another matter altogether. There is a peculiar Englishness about cycling here, and those who do so treat it very seriously. One has only to look at a copy of the Cycle Touring Club's *Cycle touring* to see this. We stayed at youth hostels (plentiful in England). Each hostel has a special shed for bikes, and keeps a log of cyclists, so that it is almost a status symbol to be riding. I rode from Weymouth up towards London, and later on from Oxford southwest to Land's End, and my main impression is of hills. Gradients of 1 in 6 and 1 in 5 were common on the secondary roads (both down then up again). Navigation is hard, as signposts will only tell you the way to the next village — maybe 1¼ miles — so you need to consult your map at each road junction. The best maps are the government survey 4" = 1 mile or Bartholomew's 5" = 1 mile. One nice detail is that bikes are carried free on most trains although your fare is very expensive, so one can avoid having to ride in closed loops. It is also handy for visiting other cities, which are difficult and costly to move around in.

Having a bike with you saves hours of travelling-time as well as money.

Denmark

I was in Denmark a few months later,

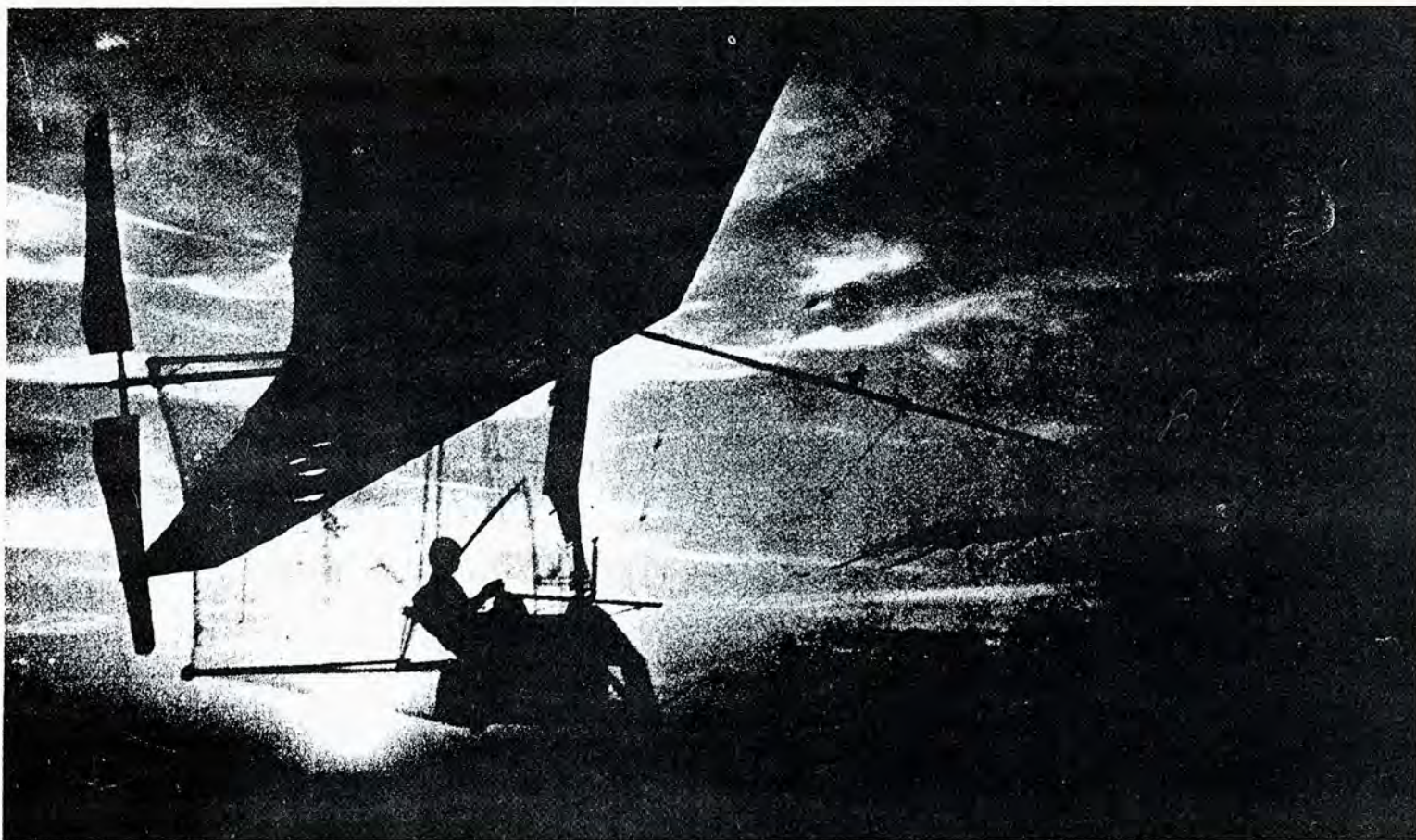
and here met many cycle tourists mostly Germans. Ordinary single speed heavy bikes are quite adequate here. The land is basically flat and there are cycle tracks everywhere. It was only at this stage of my holiday that it really dawned upon me that foreign countries really are foreign, and that their ways of doing this were quite different to my own country's. For example:

In Sweden one is permitted by law to camp virtually anywhere, even on most private property — but in Denmark it is illegal to camp anywhere but in official camping grounds.

In most countries youth hostels close from morning to evening, turfing out hostellers to roam the streets till 6.00 pm — but in Denmark most hostels only operate in the main summer season, when they are open all day.

In the UK one can take bikes free on the trains as luggage. But in Denmark one cannot take any luggage, whatsoever by train, but must send it on several days in advance by goods train (as I found out only just in time).

Once you come to accept the foreignness of another country it makes it so much easier to be there, and once you stop expecting things to happen the way they do at home you have a chance to see just what is going on around you.



Inventor Paul MacCready of Pasadena, Calif., has built manpowered aircraft which a pedal-pumping young pilot plans to fly across the English Channel in May. Financed by the Du Pont Co., of Wilmington, Del., MacCready's Gossamer Albatross (photo) will be powered on the 35 km journey from Britain to France by Bryan Allen, a 26-year-old veteran of bicycle racing and hang gliding. The flight is expected to take about two hours and the aircraft should fly at an average speed of 18 km/h. The Albatross is a lighter and more efficient version of the Gossamer Condor, a human-powered aircraft that MacCready designed and that Allen flew into the record books with a seven-and-one-half-minute flight near Bakersfield, Calif., in 1977. The Albatross is 7 k

lighter than the Condor, and has a more rigid, more smoothly contoured airfoil. Like its forerunner, it has a single propeller which is chain-driven when the seated pilot cranks a bicycle-like pedal device.

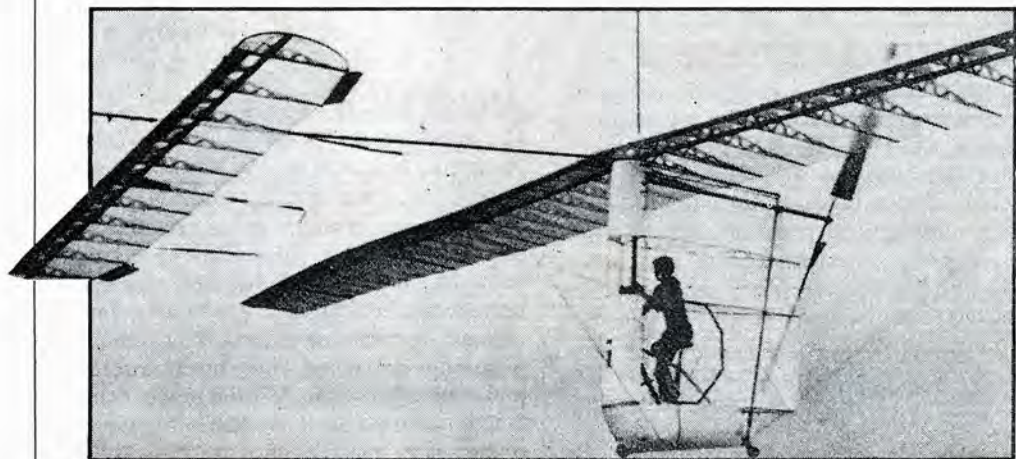
MacCready says that while the aerodynamic principles of his machine are revolutionary for a man-made aircraft, they are patterned after the way hawks and other gliding birds move their wings and tails to maneuver in the sky. A kit for constructing the Condor is available to enterprising hobbyists, but MacCready has not yet designed a kit for building the more sophisticated Albatross. Price: \$75. USA.

Newsweek April 7/79

On Gossamer Wings

Crossing the English Channel under pedal power isn't everybody's idea of an international trip, but that's not stopping Bryan Allen. He plans to do the trip in a 25kg, 30m-wingspan plane, the Gossamer Albatross, before August this year. He pedalled Albatross's predecessor, Gossamer Condor, to win the £50,000 Kremer prize for flying a mile. The new, £100,000 Kremer prize is for a course 22 times as long and Albatross has been specially built for the crossing. It has half as much drag, which means Allen will only need to produce about 165kW — about the same as he would produce to pedal himself at 30km/h on land — but he'll be doing it for at least two hours even under ideal conditions. Gossamer Albatross has a lightweight plastic drive chain, despite Allen's large power output.

One of his biggest problems is wind wakes and turbulence from supertankers. They may be slower than semi-trailers and interstate buses, but they are a lot bigger. Good luck Bryan Allen and Gossamer Albatross.



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Anybodys Cycle Club
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Eastern Bicycle Touring Club
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Bicycle Institute of Victoria
Touring Group offers help and
advice to any one wishing to start a
touring or general cycling club. All
of the above clubs are represented
by this group. For general touring
info and club help contact:
Ruurd Snoekstra, 328 1129 (H)

NEW SOUTH WALES

Bicycle Institute of NSW
399 Pitt Street, Sydney 2000
Ph: 233 5388 3674

Newcastle Cycleways Movement
6 Jefferson Street, Adamstown
NSW 2289

Central Coast Cycleways Movement
6 Kimberley Avenue
Narara NSW 2250

Cyclist Action Group
c/o Environment Centre
233 Pitt Street, Sydney 2000

NSW Amateur Bicycle Federation
Secretary: Fay Rampling
7 Neridah Avenue, Mt Colah 2079

Wheelmans Club of NSW
39 King Street, Ashbury
Ph: 798 4224

League of Wheelmen
Contact Sid Freshwater (523 4428)

Veteran Wheelmans Club
Secretary Les Oates (607 8435)

Green Valley Cycle Touring Club
Contact Russell Moore
Ph: 607 8686

Non Club Cycle Tourers
Contact Doug Sotheren
Ph: 85 4489 [H]

Cumberland Cycle Club
(Parramatta & environs)
Contact: Maurice Stanton
Ph: 648 5511 (W)

The Bicycle Institute Touring Group
offers help to any one wishing to
form a touring club or local cycle
group. General NSW touring advice
can also be obtained from extensive
files now in the process of being
catalogued. This BINSW group also
produces a touring calendar twice a
year and will advertise tours free of
charge on the calendar to any non-
profit cycle group.

BINSW Bicycle Touring Group,
399 Pitt Street, Sydney NSW 2000.

NORTHERN TERRITORY

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PO Box 3046
Darwin NT 5794

QUEENSLAND

Bicycle Institute of Queensland
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St Lucia, Qld 4067

Easy Riders Bicycle Club
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Brisbane Tandem Club
Contact: David Vidler 30 3998

The Gap Bike Club
Contact: June Bailey 30 3610

Kenmore Bicycle Club
Contact: Bill Waterfield 378 2960

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102 Bathurst Street
Hobart Tas 7000

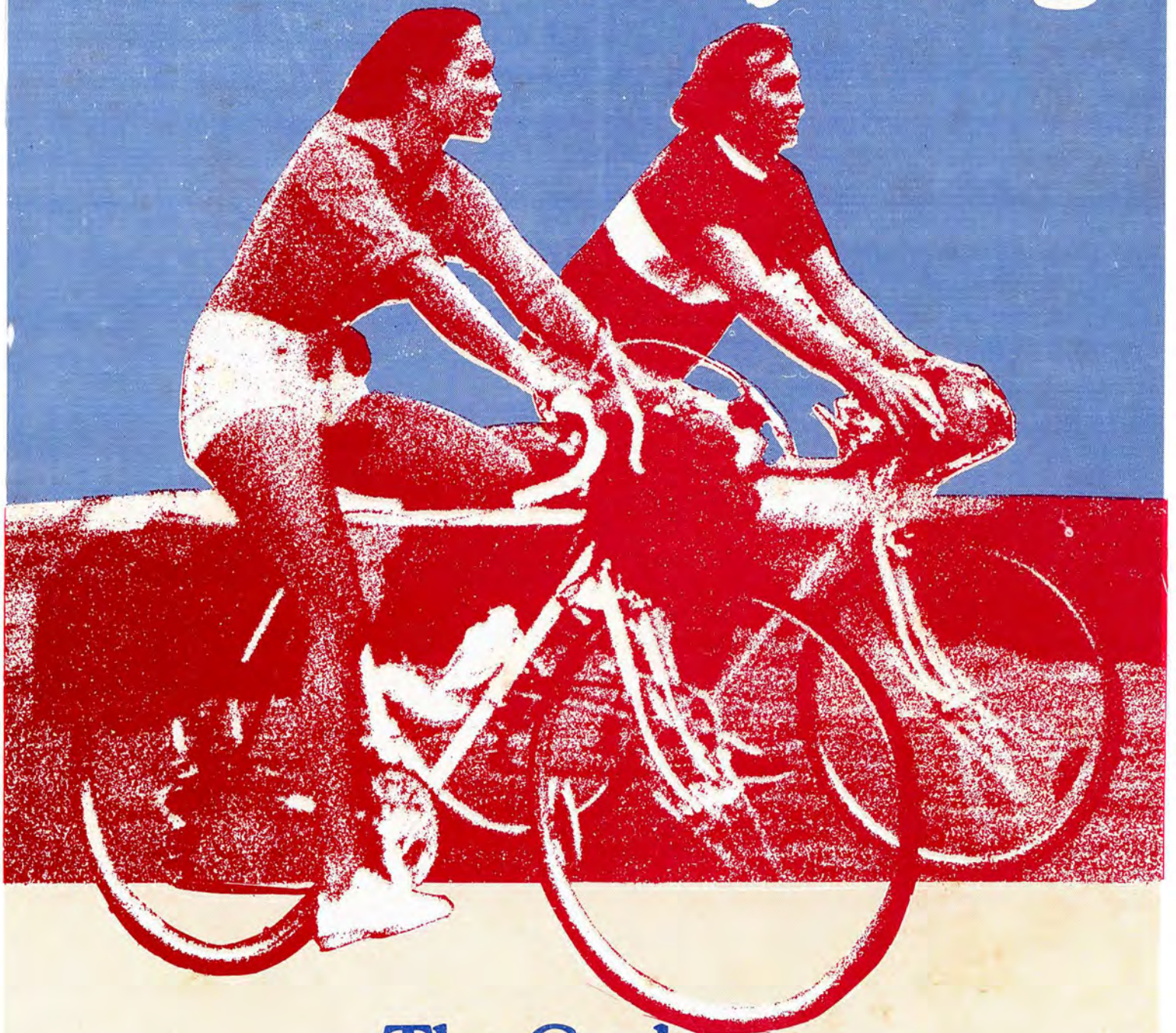
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